PUBLIC WORKS APPROPRIATIONS, 1956

UNIVERSITY OF MICHIGAN
JUL
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PEABODY ROOM

HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

EIGHTY-FOURTH CONGRESS

FIRST SESSION

ON

H. R. 6766

MAKING APPROPRIATIONS FOR PUBLIC WORKS FOR THE FISCAL YEAR ENDING JUNE 30, 1956

BUREAU OF RECLAMATION AND DEPARTMENT OF THE INTERIOR POWER MARKETING AGENCIES

Printed for the use of the Committee on Appropriations

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PUBLIC WORKS APPROPRIATIONS, 1956

TUESDAY, MAY 31, 1955

UNITED STATES SENATE,
BUREAU OF RECLAMATION AND INTERIOR
POWER MARKETING AGENCIES SUBCOMMITTEE
OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met, pursuant to notice, at 10 a. m., in room F-37, The Capitol, Hon. Carl Hayden, chairman of the subcommittee, presiding.

Present: Chairman Hayden, Senators Ellender, Knowland, Young, and Dworshak.

DEPARTMENT OF THE INTERIOR

BUREAU OF RECLAMATION

STATEMENT OF THE CHAIRMAN

Chairman HAYDEN. The committee will come to order.

This subcommittee, a division of the Subcommittee on Public Works, will consider the budget request of the Bureau of Reclamation and the Department of the Interior Power Marketing Agencies—Bonneville Power Administration, Southwestern Power Administration, Southeastern Power Administration.

The estimates to be considered total $203,913,000. This represents an increase of $6,024,000 over the amount appropriated for these agencies for the current fiscal year.

COMPARATIVE STATEMENT OF APPROPRIATIONS AND ESTIMATES

I include in the record at this point committee table BR 1 which is a comparative statement of appropriations and estimates for these agencies.

(The table referred to follows:)

TABLE NO. BR 1.—*Public Works appropriation bill, fiscal year 1956—Bureau of Reclamation and Department of the Interior power marketing agencies—comparative statement of appropriations for fiscal year 1955 and budget estimates for fiscal year 1956, by activities (May 27, 1955)*

	Appropriations, 1955	Budget estimates, 1956	Budget estimate compared with 1955 appropriations
SOUTHEASTERN POWER ADMINISTRATION			
Operation and maintenance:			
1. System operation and maintenance	$74,120	$73,000	−$1,120
2. Purchase of energy and wheeling charges	978,000	925,000	−53,000
3. Power contracts and rates	90,880	86,000	−4,880
4. General administration	85,000	76,000	−9,000
Total, Southeastern Power Administration	1,228,000	1,160,000	−68,000
SOUTHWESTERN POWER ADMINISTRATION			
Operation and maintenance:			
1. System operation and maintenance	355,000	425,000	+70,000
2. Purchase of energy and wheeling charges	2,315,000	450,000	−1,865,000
3. Power contracts and rates	30,000	55,000	+25,000
4. General administration	240,000	204,000	−36,000
Total, Southwestern Power Administration	2,940,000	1,134,000	−1,806,000
BONNEVILLE POWER ADMINISTRATION			
Construction (see table BR 2 for details):			
1. Construction in progress	19,499,000	7,286,000	−12,213,000
2. New construction	4,430,000	7,635,000	+3,205,000
3. General plant	385,000	432,000	+47,000
Total construction	24,314,000	[1] 15,353,000	−8,961,000
Operation and maintenance:			
1. System operation and maintenance	5,307,200	5,816,000	+508,800
2. Power contracts and rates	256,800	229,000	−27,800
3. General administration	636,000	605,000	−31,000
Total, operation and maintenance	6,200,000	6,650,000	+450,000
Total, Bonneville Power Administration	30,514,000	22,003,000	−8,511,000
BUREAU OF RECLAMATION			
General investigations:			
1. Engineering and economic investigations	3,416,392	4,555,500	+1,139,108
2. Advance planning	183,800	490,000	+306,200
3. Investigations of existing projects	49,808	29,500	−20,308
4. Alaskan investigations	100,000	100,000	
Total, general investigations	3,750,000	5,175,000	+1,425,000
Construction and rehabilitation (see table BR 3 for details)	133,757,000	[2] 146,041,000	+12,284,000
Operation and maintenance	21,500,000	24,000,000	+2,500,000
General administrative expenses:			
1. Departmental and Denver offices	2,200,000	2,038,000	−162,000
2. Regional offices	1,800,000	1,662,000	−138,000
Total, general administrative expenses	4,000,000	3,700,000	−300,000
Emergency fund	200,000	700,000	+500,000
Total, Bureau of Reclamation	163,207,000	179,616,000	+16,409,000
Total, reclamation and power agencies	197,889,000	203,913,000	+6,024,000

[1] Reflects reduction of $1,103,000 contained in H. Doc. 156.
[2] Includes increase of $3,700,000 contained in H. Doc. 161.

Chairman HAYDEN. Secretary Aandahl is here this morning and will give a general statement, and then representatives of each agency will appear before the subcommittee to discuss in detail each of the appropriations.

You may proceed, Mr. Secretary.

RECLAMATION AND POWER MARKETING

STATEMENT OF HON. F. G. AANDAHL, ASSISTANT SECRETARY OF THE INTERIOR FOR WATER AND POWER, ACCOMPANIED BY S. D. LARSON, DIRECTOR, DIVISION OF BUDGET AND FINANCE, AND K. J. PLUCKNETT, ELECTRICAL ENGINEER, INTERIOR DEPARTMENT

BUDGET ESTIMATE

Mr. AANDAHL. Mr. Chairman and members of the committee, I am pleased to have this opportunity to appear before this committee to present the programs of the Department of the Interior which concern reclamation and the marketing of electric power generated at multipurpose projects constructed by the Federal Government.

Budget estimates of new cash requirements for fiscal year 1956 to carry out these programs are in the amount of $203,913,000 which cover the activities of the Bureau of Reclamation, the Bonneville Power Administration, the Southwestern Power Administration, and the Southeastern Power Administration.

GENERAL PROGRAM GOALS

With the permission of the committee, I would like to confine my remarks to the general program goals proposed by the estimates inasmuch as operating officials will appear before you to justify each program item in detail.

BUREAU OF RECLAMATION

The estimate for the Bureau of Reclamation totals $179,616,000. This represents an increase of $16,409,000 over the amount appropriated for fiscal year 1955. The estimate will provide a continued and economic construction program to make available lifegiving water to semiarid lands in the 17 Western States and to continue work on the power generation and transmission facilities of the Bureau.

GENERAL INVESTIGATIONS

The estimate of $5,175,000 for "General investigations" represents an increase of $1,425,000 over the appropriation for fiscal year 1955. We propose to place increased emphasis on the investigation of and planning for water resource developments. This work is basic and essential if we are to have available factual data upon which construction authorizations may be determined.

Chairman HAYDEN. Did the Bureau of the Budget allow you all the Department of Interior requested for general investigations?

Mr. AANDAHL. When we submitted our request to the Bureau of the Budget, we had a within-ceiling figure and the amount that we have been allowed in our general investigations is the amount that we asked in that within-ceiling figure. However, we did suggest additional amounts in an overceiling amount which was not allowed.

OVERCEILING ESTIMATES

Chairman HAYDEN. How much was that overceiling amount?

Mr. AANDAHL. The total was $6,165,000.

Chairman HAYDEN. My opinion, and I am sure Senator Young shares it with me, is that there is no more important work to be done by the Bureau of Reclamation than a thorough investigation of the projects before they are undertaken, and after they are undertaken, to keep track of what was going on. I have never believed that the Bureau of the Budget allowed enough money for this work.

Senator YOUNG. I feel the same way. I feel we have never appropriated enough money for this type of work since my time in Congress.

Mr. AANDAHL. We feel in the Department of the Interior that there is just a lot of this additional investigating work that can properly be done if the funds are available.

Chairman HAYDEN. For example, a project is authorized years ago, and then you have change. Then there are alternative ways of doing things. If you have an opportunity to review these projects, you can find a more economical and efficient way to accomplish the desired result. I think it is very short-sighted not to allow the Bureau what it really needs for investigations.

You may proceed.

CONSTRUCTION AND REHABILITATION

Mr. AANDAHL. The estimate for "Construction" is $146,041,000, which includes an amendment to the budget set forth in House Document No. 161 in the amount of $3,700,000 for the purchase of outstanding bonds of the Middle Rio Grande conservancy district.

The estimate proposes five new starts for irrigation developments which were authorized for construction by the past session of the Congress. Funds in the amount of $4,386,000 are included for these works at the following projects:

1. Chief Joseph Dam, Foster Creek division, Washington.
2. Deschutes-Haystack equalizing reservoir, Oregon.
3. Michaud Flats, Idaho.
4. Palo Verde, Ariz.-Calif.
5. Santa Maria, Calif.

The balance of $137,955,000 for construction is required to meet the need for continuing work now underway. This includes continued work on new starts appropriated for in the Supplemental Appropriation Act, 1955, for irrigation and power-producing units in the Missouri River Basin as follows:

1. Glendo unit, Wyoming.
2. Hanover Bluff unit, Wyoming.
3. Heart Butte unit, North Dakota.
4. Helena Valley unit, Montana.
5. Sargent unit, Nebraska.

The estimate provides for an economic rate of construction on irrigation distribution systems in the San Joaquin and Sacramento Valleys in California and the canal systems in the Columbia Basin, Wash.; dams and canals in the Weber Basin, Utah and Solano, Calif.; Utah irrigation projects; the Palisades Dam and powerplant in Idaho;

irrigation facilities on the Frenchman-Cambridge and Bostwick developments in Nebraska and Kansas; and the Tiber Dam in western Montana.

OPERATION AND MAINTENANCE

In fiscal year 1956 additional operating facilities will be brought into service. It is estimated that 204,000 acres of land will receive initial water. We expect to add 120,000 kilowatts of power from Folsom Dam of the Central Valley project, California, and the Kennewick division of the Yakima project, Washington. It is anticipated 300 miles of transmission lines and added substation capacity will come into operation during the year. To meet these and other increased operational requirements, the estimate provides for an appropriation of $24 million, an increase of $2,500,000 over the current fiscal year.

Chairman HAYDEN. Is that all you requested from the Budget Bureau? I ask that question because my understanding of operation and maintenance is that the charges on several projects are about those that are agreed to by the water users each year, and they pay them.

Mr. AANDAHL. Our request to the Bureau of the Budget was $28,237,000 for operation and maintenance.

Chairman HAYDEN. Did the Bureau of the Budget figure that that is saving the taxpayers any money by cutting that down? Operation and maintenance is paid by the water users on the projects. If they want certain improvements made, and they agree in advance that they want them made and agree to pay for them, it does not cost the taxpayers a cent. It is just a bookkeeping affair as far as I can see it.

Mr. AANDAHL. I feel that it is important to have adequate funds so that these projects after they are once built can be properly maintained. If they are not properly maintained, we are just headed for heavier expenses at a later time.

Chairman HAYDEN. We can develop this matter perhaps in greater degree with the Bureau of Reclamation, but I would like to have the benefit of your judgment on a matter of this kind. It seems to me that the Department of the Interior ought to inform the Bureau of the Budget that a major portion of this money is returned to the Treasury by the water users.

Mr. AANDAHL. I might state, Senator, that under a tighter budget perhaps it is possible to squeeze just a little harder. The tightness of the budget just makes mandatory greater efficiency in the maintenance and operation work that is being done. I do not want to take the position that I am entirely in disagreement from the balanced judgment that comes from the Bureau of the Budget and the Department of the Interior. In response to your question, I must advise you that to begin with we asked for more money.

Chairman HAYDEN. You keep on asking for it, and I wish you luck in getting it. You may proceed.

GENERAL ADMINISTRATIVE EXPENSES

Mr. AANDAHL. The estimate for administration is $3,700,000 which will allow for the same general level of expenses as in the current fiscal year after consideration of the transfer of funds to the Office of the Solicitor which was provided for in the Interior Department Appropriation Act, 1955.

EMERGENCY FUND

In order that the Bureau may be able to meet emergency conditions which may occur in its irrigation and power facilities, the estimate proposes an appropriation of $700,000. This is an increase of $500,000 over the appropriation for fiscal year 1955.

Chairman HAYDEN. When the Bureau is here, I think it would be well for them to insert in the record just what they have expended from the emergency fund.

Mr. AANDAHL. You will want that information when they give their detailed report.

Chairman HAYDEN. Yes.

Mr. AANDAHL. Yes, sir.

BONNEVILLE POWER ADMINISTRATION

The estimate of $22,003,000 for the Bonneville Power Administration represents a construction and operating program designed to achieve the full development of the Northwest's power requirements through the cooperative efforts of the Administration and the region's public and private utility systems. We have been able to establish a working relationship with these utility groups through cooperative studies and efforts by which Federal transmission needs can be established. The estimate before you represents the result of such cooperative effort.

CONSTRUCTION

The new cash requirements for construction of transmission facilities of $15,353,000. This includes the reduction of $1,103,000 from the original estimate as is proposed in House Document No. 156. Taking into consideration unobligated balances of prior year appropriations and anticipated reimbursements, the construction program of the Administration for fiscal year 1956 will total $27,518,000.

Chairman HAYDEN. Are you satisfied with that amount, or did you ask for more?

Mr. AANDAHL. As far as I know, that is satisfactory.

The work program for going construction is $19,383,000. This will allow for completion during the year of about 460 miles of transmission lines and related substation capacity. Progress will be made on an additional 385 miles of line scheduled for completion after fiscal year 1956. Provision is made for substantial completion of system installation of communication and intelligence equipment.

New construction in the amount of $7,635,000 will provide for initiation of 235 miles of transmission lines, additional transformation in existing substations, and equipment installations to the system.

We also provide $500,000 for the purchase of tools and equipment including the replacement of 10 passenger motor vehicles.

OPERATION AND MAINTENANCE

The estimate of $6,650,000 for operation and maintenance of the transmission system represents an increase of $507,385 over the amount appropriated in 1955 after consideration of the transfer to the Office of the Solicitor. In excess of 87 percent of the estimate is applied to work directly connected with system operation and main-

tenance. The balance provides for expenses of administration, customer service, power contracts, and rate negotiations.

SOUTHWESTERN POWER ADMINISTRATION

The estimate for operation and maintenance of the Southwestern Power Administration and its transmission system is $1,134,000. This is a reduction of $1,031,000 below the appropriation of $2,165,000 for the current fiscal year. The decrease is made possible by elimination from the estimate of funds appropriated in fiscal year 1955 for carrying out interim contracts with generating and transmission cooperatives in the area.

The Administration will operate and maintain 1,004 miles of Federal transmission lines and 13 substations, constructed to integrate the hydroelectric power generated at projects constructed in the area by the Corps of Engineers and to deliver power to customer load centers. Funds are provided for the purchase of firming energy and payment of wheeling charges, administrative expenses, and customer, rate, and contract services.

Chairman HAYDEN. Not long ago we appropriated an additional amount of money to carry on this operation. In your opinion, will there be a demand for an increase in this amount of a like measure for the full year?

Mr. AANDAHL. As you know, the proposed replacement contracts for the inoperative contracts that have been held in abeyance for several years have not been completed.

Chairman HAYDEN. How near are you to completion?

Mr. AANDAHL. We have a draft of a hydro contract, and the hydro contract is the contract by which Southwestern Power Administration will sell hydro power to the G. and T.'s and it will be associated with an integration contract between the G. and T.'s and the utilities in the area. The hydro contract that Southwestern Power Administration will enter into with the G. and T.'s is in draft form. As far as Interior and SPA is concerned, it is substantially satisfactory.

Senator ELLENDER. To whom?

Mr. AANDAHL. It is satisfactory to us and as far as I know it is satisfactory to the G. and T.'s.

Senator ELLENDER. How about the rest of the opposition to that method?

Mr. AANDAHL. There is a great deal of question as to whether or not the G. and T.'s want to go into this kind of arrangement, but if they decide to go into this kind of arrangement, the draft contract is substantially satisfactory.

ATTITUDE OF POWER COMPANIES

Senator YOUNG. Will the power companies approve of that form of contract?

Mr. AANDAHL. The draft contract is substantially satisfactory to the power companies, to the G. and T.'s, and to the Government.

Senator ELLENDER. Would the power companies agree to furnish the wheeling charges and enter into the contract?

Mr. AANDAHL. The hydro contract between the Southwestern Power Administration and the G. and T.'s is merely a straight sale

of hydo capacity and energy that we have to the G. and T.'s; under the proposed integration plan, the G. and T.'s would immediately resell this hydro power to the utilities. Under this contract by which they would resell it to the utilities, the utilities would agree to firm it up and would take over the operation of the G. and T. transmission lines, and would deliver power to the G. and T.'s at a specified rate under this integration contract.

Senator ELLENDER. How would that specified rate differ from that which the cooperatives are now paying?

Mr. AANDAHL. I cannot speak too specifically about that rate, because I only have scattered information about this integration contract between the G. and T.'s and the cooperatives, or between the G. and T.'s and the utilities.

The rate that the cooperatives will have to pay under that integration contract is higher than the present rate schedule A that would apply to these inoperative contracts of 5.6 mills. The Department of the Interior and Southwestern Power Administration currently has a revised rate schedule A before the Federal Power Commission that sets up a rate of 7.16 mills. If the inoperative contracts were to be reinstated, I am sure that rate would have to be substantially above the 7.16 mills that we now have before the Federal Power Commission. I am inclined to feel that the rates that the utilities will be able to offer to the cooperatives will be comparable to a rate that we would have to ask if we were to reinstate these inoperative contracts and provide for the repayment of the investment over the 50-year period, as is the general practice.

Senator ELLENDER. As a matter of fact, the public utilities have been angling for the purchase of these powerlines for quite some time, and according to what you say there, they end up acquiring them.

Mr. AANDAHL. The integration contract does not involve a purchase of the lines. Under the integration contract the utilities will under contract take over the operation of the lines, but the ownership will also be vested in the G. and T.'s.

Senator ELLENDER. Will the payments be sufficient to take care of them?

Mr. AANDAHL. Yes, the integration contract is being worked out on that basis. The utilities will take over the responsibility for the payment of the amounts that are necessary for the amortization of the G. and T. investment with the interest.

Senator ELLENDER. So that after these power lines have been paid and all obligations canceled out, they will remain the property of the G. and T.'s.

Mr. AANDAHL. That is correct.

Senator ELLENDER. Have you heard of anything that may again postpone the culmination of this contract?

ATTEMPT TO REINSTATE INOPERATIVE CONTRACTS

Mr. AANDAHL. Again I must say that while the hydro contract has been worked out in draft form that is reasonably satisfactory to the different groups that will be involved if we use that type of arrangement, we do not have full agreement and full enthusiasm for that type of arrangement, and the G. and T.'s, I think, are asking Congress to appropriate money in a continuing fund to reinstate these inoperative contracts.

Senator ELLENDER. The thing that makes me unhappy about this whole situation is that it seems that contracts are just about to be entered into when Congress is about to appropriate. There is always something in the future that arrests their execution. My hope is that every effort will be made to settle this thing so that the Congress will not be obligated to carry this load. I know it is quite a load. It is an indirect subsidy without question. I was very hopeful that the power companies would see the light and take over this obligation and settle it as soon as possible.

Mr. AANDAHL. We must recognize that these alternative contracts that are being worked out are quite different in basic principle than the inoperative contracts on which the G. and T.'s had expected to operate. You just don't get thinking adjusted and get groups together on an entirely new proposal of that kind very quickly. All the way through the negotiations, I think it is entirely fair for me to say that the cooperatives have been hesitant and uncertain, and I don't blame them at all for that because it was quite a departure from the inoperative contracts. They have been hesitant and uncertain and right up to the present time they are still thinking with some hope of getting these inoperative contracts reinstated.

Senator ELLENDER. I agree with you on what you have just said, except that it is not a new thing. It has been going on for 4 or 5 years. Some of us felt that it was going to be settled 2 or 3 years ago. Here we are almost in the same position as we were at the time this matter was first considered. The contract is still dangling over our heads with no definite agreement having been reached by anybody, except that there is a good prospect.

RESPONSIBILITY FOR CONTRACT

Mr. AANDAHL. We in the Interior have been pushing just as hard as we can. The primary responsibility for the integration contract is a responsibility between the G. and T.'s and the utilities. Interior with propriety cannot get too deeply into those negotiations. The REA Administrator and his office has been much more closely associated with the integrated contracts than has Interior. Interior has some hydro to sell, and we want to sell that under terms and conditions so it can be used under these integration contracts. But the basic business responsibility is between the G. and T.'s and the utilities in the area.

Interior has been just as helpful as it possibly can be, and has been pushing and encouraging these new contracts. We have had some difficulties in making the definite commitments as to what we can do. First, there was the question of the price that we would have to have for this hydro. That restudy of the rate schedule involved quite an amount of time. Just about when we were ready to have it completed, we ran into an unprecedented drought, which means that now with each kilowatt of capacity that we have there, we have 150 kilowatt-hours of energy each month instead of 200, as had been placed in the other contracts. That required an adjustment in rate schedules. Then we have this controversial question of cost allocations. We had to get that ironed out. That required agreement between Interior, the Federal Power Commission, and the Corps of Engineers. That has been done. It was only some few months ago that we had a revised rate schedule over before the Federal Power Commission

which we could also give to the G. and T.'s as the rate that we would expect to write into these contracts.

Then, too, there has been the question of the amount of hydro power we would have to put in these contracts. This drought has had quite an effect on it. We have had great difficulty in firming up a figure. We have told the co-ops we have 130,000 kilowatts of capacity that we can put into these hydro contracts to replace the inoperative contracts. It has taken quite a while before even Interior, which is most anxious to get underway, could give some of the firm information that was necessary to complete contracts.

Senator ELLENDER. As I recall, when Mr. Chapman was head of Interior, everything was satisfactory to all concerned except Interior.

Mr. AANDAHL. You now have reference to the 12 companies.

Senator ELLENDER. It is that whole situation that could have been settled. I simply want to express the hope that nothing will be left undone by Interior to settle this once and for all, because it has been pending now entirely too long.

ADDITIONAL POWER FROM TABLE ROCK

Mr. AANDAHL. We are ready to go ahead at any time, and we have mimeographed a hydro contract that is basically satisfactory to Interior. We still have a problem of determining how this 130,000 kilowatts of capacity is to be divided among the 5 G. and T.'s. There is also the possibility that a little additional power will be available from Table Rock when it comes in. The only commitment that Interior has made so far is the 130,000 kilowatts that we presently have available. In the negotiations there has been talk of some of the Table Rock power, too, when that project comes into production.

Senator ELLENDER. I assume we will hear the other side as folks come up and testify in asking for more money.

Mr. AANDAHL. I am sure you will.

I do want to say that I hope the inoperative contracts will not be reinstated. I hope there will be an opportunity to complete the hydro contract arrangement that is well underway at the present time.

Chairman HAYDEN. Is there any doubt in your mind that if we had not disturbed what you call the inoperative contracts, in view of the increased demand for power, that scheme would have worked and paid out?

Mr. AANDAHL. There is not any question but that the inoperative contracts were one way of handling that situation. I am sure that under the inoperative contracts rate schedule A would have been set at a figure substantially above the 7.16 mills that we now have before the Federal Power Commission. But there is no question but that it was one way under which this matter could be handled.

Chairman HAYDEN. Congress decided to change it and not appropriate any more money for the continuing fund and we got into this difficulty. I still deeply regret that Secretary Chapman did not sign the contract Senator Ellender referred to.

Senator ELLENDER. I do, too.

Chairman HAYDEN. That is water over the dam, and you would like us to take this matter up with Douglas Wright when he comes up.

Mr. AANDAHL. That is right. I do not know of any problem in the Department of the Interior that I have kept closer to than these contracts we have been speaking about.

Chairman HAYDEN. You may proceed.

SOUTHEASTERN POWER ADMINISTRATION

Mr. AANDAHL. The estimate of $1,160,000 for the Southeastern Power Administration covers operating expenses for the sale and transmission of power in the area. The Administration does not operate or maintain a Federal transmission system. The marketing of power is accomplished through the use of transmission facilities owned and maintained by other utility systems.

Power is now being marketed from seven multipurpose projects constructed by the Corps of Engineers. These projects have an installed capacity of 1,031,600 kilowatts. During the period 1956–58 an additional 252,000 kilowatts will be available from 4 projects now under construction.

LONG-TERM CONTRACTS FOR SALE AND TRANSMISSION

The program of the Administration for fiscal year 1956 is directed to the negotiation and administration of long-term contracts for the sale and transmission of power to preferred and other customers. Work will continue on the development of power rates to insure the return of capital investment chargeable to power and to pay the cost of operating expenditures. The greater part of the estimate is to cover the purchase of firming energy and cost of wheeling charges under a contract with the Virginia Electric & Power Co.

GEORGIA POWER CO. CONTRACT

Chairman HAYDEN. Do you have a comparable understanding with the Georgia Power Co.

Mr. AANDAHL. No. During the last 2 weeks of May in 1954, we completed the draft of a tricontract arrangement. The Georgia Power Co. was then ready, and willing to sign that contract. We did not approve it in Interior. I personally recommended it for approval, but the Secretary did not see fit to approve it at that time. It has been up for consideration several times since then.

Currently, Mr. Ancher Nelsen, the REA Administrator, is taking the initiative in trying to work out a contract that will be a modification of the tricontract, but similar in many ways.

Chairman HAYDEN. That is for Clark Hill power?

Mr. AANDAHL. Yes, in the State of Georgia. It is for disposition of one-half of the output of the Clark Hill project.

Chairman HAYDEN. Does that conclude your statement?

Mr. AANDAHL. Yes, sir.

Chairman HAYDEN. We will now hear from the Bureau of Reclamation.

Bureau of Reclamation

STATEMENTS OF E. G. NIELSEN, ASSISTANT COMMISSIONER; S. W. CROSTHWAIT, ASSISTANT COMMISSIONER; N. B. BENNETT, JR., CHIEF, PROJECT DEVELOPMENT DIVISION; F. E. DOMINY, CHIEF, IRRIGATION DIVISION; D. S. CAMPBELL, CHIEF, POWER DIVISION; G. E. TOMLINSON, ASSISTANT CHIEF, PROJECT DEVELOPMENT DIVISION; A. R. GOLZÉ, CHIEF, PROGRAM COORDINATION AND FINANCE DIVISION; AND D. S. MITCHELL, CHIEF, LAND AND WATER BRANCH, IRRIGATION DIVISION

PREPARED STATEMENT

Mr. Nielsen. Mr. Chairman, I have a prepared statement.

Chairman Hayden. You may proceed.

Mr. Nielsen. My name is E. G. Nielsen. I am Assistant Commissioner of the Bureau of Reclamation.

Chairman Hayden. Do you want to read all of this?

Mr. Nielsen. That is at your pleasure, sir.

Chairman Hayden. Would you prefer to put it in the record and highlight it?

Mr. Nielsen. I will put it in the record and highlight it, sir.

Chairman Hayden. I think it would save the time of the committee.

(The statement referred to follows:)

Statement of Bureau of Reclamation

This is a summary report on reclamation's program and fund requirements for the fiscal year 1956. The proposed program for 1956 is one designed primarily to continue the construction work now under way at a reasonable rate, and also starting a few new projects. The companion programs of investigations and operation and maintenance are scheduled on a conservative basis.

We are requesting a total of $179,616,000 under five appropriation heads, viz. "General investigations," "Construction and rehabilitation," "Operation and maintenance," "General administrative expenses and the emergency fund." This compares with appropriations of $163,207,000 for fiscal year 1955. The money requested for 1956 together with carryover funds from the prior year will permit the Bureau to carry out a well-balanced program.

GENERAL INVESTIGATIONS

For the general investigation program outside the Missouri River Basin we are requesting $5,175,000 compared to $3,750,000 appropriated for the current year. This increase is designed to get our investigation program moving at a rate more nearly consistent with the need. This appropriation is highly important in the reclamation program. It pays for surveys, studies and reports that must precede authorization of new projects. Without adequate investigations there can be no important authorizations. In recent years appropriations for this important phase of the Bureau's program have been less than considered necessary to keep pace with the economic development of the West.

I am hopeful that we may be permitted in the next few years to have sufficient appropriations to complete studies and reports in order to build up a good shelf of worthwhile projects. Such projects could then be built as the needs of the country require and its financial situation allows.

Most of the requested funds would be spent to further the advancement of plans for proposed projects. Over 80 percent of the program for 1956 will be devoted to engineering and economic investigations. Another 16 percent would be devoted to advance planning on authorized projects, for which construction appropriations are not requested and to the Ventura project in California for which local interests have contributed funds. Since fiscal year 1949, we have been carrying on an investigation program in Alaska to form the basis of legisla-

tion for water resource development in that territory. $100,000 of the 1956 estimate would be devoted to a continuation of that program at about the same level as this year. We also plan to spend $50,000 on the investigations of two projects in Hawaii, authorized by Public Law 634, passed at the last session of Congress.

CONSTRUCTION AND REHABILITATION

The estimate for construction and rehabilitation is $146,041,000. For the current year Congress appropriated $133,757,000. The estimate before you has been allotted to the different projects to maintain a reasonable and economic rate of progress and to start 4 new projects and 1 new important project feature.

As in prior years most of the construction money will go for continuing work on projects underway at the end of the previous fiscal year. In addition to the new starts, there will be 30 regular projects and 21 Missouri River Basin units under construction in fiscal year 1956, including 3 projects and 4 Missouri River Basin units started this fiscal year. Six major projects will require 79 percent of the fiscal year 1956 funds. These are: Central Valley and the Solano projects in California, the Palisades project in Idaho, the Weber Basin project in Utah, the Columbia Basin project in Washington and the Missouri River Basin project in the northern Great Plains. On all of these projects work is progressing satisfactorily.

Investigations in the Missouri River Basin, a companion program to the general investigations program discussed above is financed from the construction and rehabilitation appropriation. In fiscal year 1956 provision is made for a continuation of advance planning work on 10 units and the start of advance planning on 1 division and 1 unit. The request also includes funds for continued work on 10 basin surveys to work up comprehensive basinwide plans for future development.

We expect to complete work in fiscal year 1956 on four projects. These are the Cachuma project in California, the spillway enlargement at the Alamogordo Dam on the Carlsbad project in New Mexico, the Crescent Lake Dam in Oregon and the Yuma auxiliary project in Arizona. Minor work on the Rio Grande project in New Mexico and the Pine River project in Colorado will also be completed.

During its last session, the Congress authorized several new projects for construction and provision has been made in the estimates for starting work on 4 projects and a regulating reservoir on 1 of the older projects. The new projects included in the budget are the Palo Verde project on the lower Colorado River, the Santa Maria project in California, the Michaud Flats project in Idaho and the Foster Creek division of the Chief Joseph Dam project in Washington. When completed these projects will improve the irrigation water supply for 36,830 acres already irrigated and bring the water supplies to 18,585 areas. Construction will also be initiated in 1956 on the Haystack regulating reservoir to improve service for the 50,000 acres of the completed north unit of the Deschutes project in central Oregon.

OPERATION AND MAINTENANCE

We are requesting $24 million to finance the operation and maintenance program in 1956. This is an increase of $2.5 million over the $21.5 million available for this purpose in the current year. These funds will operate and maintain 38 projects or divisions of projects and 19 Missouri River Basin units.

The increased funds are required to operate additional power facilities going into operation for the first time and to meet the growing cost of wheeling and purchase of power. Important Bureau powerplants coming into operation this year are the Eklutna plant in Alaska, which began producing power in January, the Folsom and Nimbus plants in California on the Central Valley project both of which began partial operation this spring and the two units at the Alcova powerplant on the Kendrick project in Wyoming which are expected to be in service this summer.

Due to the transfer of additional projects to the water users, the irrigation portion of the operation and maintenance estimate is less in fiscal year 1956 than in fiscal year 1955 even though 204,000 acres will receive water for the first time in 1956.

GENERAL ADMINISTRATIVE EXPENSES

Our request for general administrative expense funds of $3,700,000 is $300,000 less than the $4 million appropriated for the current fiscal year. The difference is due to funds transferred to the Office of the Solicitor this year. In 1956 it is planned to continue the Washington office and the field activities financed with this appropriation at about the same level as this year. These funds, nonreim-

bursable in nature, are used to finance the general administration work, including necessary relations with other Government agencies, inspection, and other administrative activities associated with projects turned over to the water users, the audit of operating project accounts, and general direction of the three major programs of the Bureau.

EMERGENCY FUND

Our emergency fund request for fiscal year 1956 for $700,000 is designed to insure a balance in this fund of approximately $1 million the amount of the initial appropriation in fiscal year 1949.

TOTAL REQUEST

Mr. NIELSEN. We are requesting a total of $179,616,000 under 5 appropriations heads; that is, "General Investigations," "Construction and Rehabilitation," "Operation and Maintenance," "General Administrative Expenses," and the "Emergency Fund."

This compares with appropriations of $163,207,000 for fiscal year 1955.

The money requested for 1956, together with carryover funds from the prior year will permit the Bureau to carry out a well-balanced program.

CARRYOVER FUNDS

Chairman HAYDEN. You have these carryover funds pretty well nailed down so you know what they are?

Mr. NIELSEN. We think they are, sir. We will have a statement for you on carryover funds before the hearing is over.

Chairman HAYDEN. When we get down toward the end of the fiscal year and there is always a certain amount of guesswork on how much is actually going to be left over.

We would like to get the latest figures available.

Mr. NIELSEN. Yes, sir.

Senator KNOWLAND. It would certainly be refreshing if we could get an agreed-on figure.

Mr. NIELSON. For general investigations, we are requesting $5,175,000 compared to $3,750,000 appropriated for the current year.

We are trying to get our investigation program geared more nearly to the need and as well to an established program rather than the up and down program we have had in past years.

NEED FOR STABLE FUND FOR INVESTIGATIONS

Chairman HAYDEN. It has been most unfortunate that 1 year you would have a substantial sum of money and another year you would get cut back and then another year it would be picked up.

The real need is a stable sum, and you should retain your men on the job. If you lose them to private industry, you have difficulty getting them back.

Mr. NIELSEN. We have enough troubles keeping them without introducing that other element.

Of course, without adequate investigation there cannot be adequate authorizations.

Chairman HAYDEN. When projects were authorized sometime ago, you have to revise the figures to see how they fit modern prices?

Mr. NIELSEN. That is right.

Most of the requested funds would be spent to further plans for proposed projects. Over 80 percent of the program for 1956 will be devoted to engineering and economic investigations.

Another 16 percent would be devoted to advance planning on authorized projects for which construction appropriations are not requested, and to the Ventura project in California for which local interests have contributed funds.

INVESTIGATION PROGRAM IN ALASKA

Since fiscal year 1949, we have been carrying on an investigation program in Alaska to form the basis of legislation for water-resource development in that Territory. $100,000 of the 1956 estimate would be devoted to a continuation of that program at about the same level as this year.

We also plan to spend $50,000 on the investigations of 2 projects in Hawaii, authorized by Public Law 634, passed at the last session of Congress.

Chairman HAYDEN. There is no irrigation in Alaska. That would be power development.

Mr. NIELSEN. There is a possibility of some irrigation.

Chairman HAYDEN. Of course, irrigation is possible in Hawaii.

Mr. NIELSEN. That is right.

Chairman HAYDEN. What is the nature of the Hawaii project?

Mr. NIELSEN. Mr. Bennett was with the House committee over there and I think he can explain the proposed investigation.

HAWAIIAN PROJECTS

Mr. BENNETT. The two projects which we propose to examine are the Waimea project and the Molokai.

The Molokai is on the Island of Molokai. It is a project which has been investigated many, many times, which would bring irrigation to almost the entire central part of the island. The island itself is unique in that it is the one island that is really dry throughout almost all of its territory. It has been investigated rather thoroughly to date by the Hawaiian Irrigation Authority, an agency created in 1954.

Our money on that project would go to a review of their plans and provisions for technical assistance.

DRY LAND AREAS IN HAWAII

Chairman HAYDEN. My understanding is that in Hawaii the prevailing winds heavily laden with moisture strike a mountain range and then the rain precipitates.

On the other side of the range you find the dry land.

Mr. BENNETT. That is correct.

Chairman HAYDEN. Do all these schemes involve going around or under those mountains to get the water to the dry side?

HORIZONTAL WELLS

Mr. BENNETT. Substantially, yes. They have another way of getting water in Hawaii that is quite unique. They drill what they call horizontal wells and they tap the basal water. Fresh water perco-

lating through the lava hits the salt water which underlies all of the island and sits there on top of the salt water.

By drilling these horizontal wells in the right places they can tap that fresh water and draw it off the top of the salt water without going through the mountains to the other side.

That is done quite frequently. That is the principal source of water supply for the city of Honolulu, for instance. That would be the scheme used on the Waimea project.

Some thought has been given to developing Molokai the same manner.

Chairman HAYDEN. In that case, of course, what you would do is a lot of experimental drilling to see if the water is there.

Mr. BENNETT. That type of work has been pretty generally done on Molokai. I think our work will only go to a review of what has been done and is it satisfactory.

Mr. NIELSEN. I would like to read most of construction and rehabilitation, Mr. Chairman.

Chairman HAYDEN. Very well.

TOTAL ESTIMATE

Mr. NIELSEN. The estimate for construction and rehabilitation is $146,041,000. For the current year Congress appropriated $133,757,000. The estimate before you has been allotted to the different projects to maintain a reasonable and economic rate of progress and to start 4 new projects and 1 new important project feature.

As in prior years most of the construction money will go for continuing work on projects underway at the end of the previous fiscal year.

UNITS UNDER CONSTRUCTION

In addition to the new starts, there will be 30 regular projects and 21 Missouri River Basin units under construction in fiscal year 1956, including 3 projects and 4 Missouri River Basin units started this fiscal year.

These are: Central Valley and the Solano projects in California; the Palisades project in Idaho; the Weber Basin project in Utah; the Columbia Basin project in Washington; and the Missouri River Basin project in the northern Great Plains.

On all of these projects work is progressing satisfactorily.

Investigations in the Missouri River Basin, a companion program to the general investigations program discussed above, is financed from the construction and rehabilitation appropriation.

In fiscal year 1956 provision is made for a continuation of advance planning work on 10 units and the start of advance planning on 1 division and 1 unit.

The request also includes funds for continued work on 10 basin surveys to work up comprehensive basinwide plans for future development.

PROJECTS TO BE COMPLETED

We expect to complete work in fiscal year 1956 on four projects. These are the Cachuma project in California, the spillway enlargement at the Alamogordo Dam on the Carlsbad project in New Mex-

ico, the Crescent Lake Dam in Oregon, and the Yuma auxiliary project in Arizona.

Minor work on the Rio Grande project in New Mexico and the Pine River project in Colorado will also be completed.

Chairman HAYDEN. There is money enough in your estimates to complete these four projects?

Mr. NIELSEN. Yes, sir.

NEW PROJECTS AUTHORIZED

During its last session, the Congress authorized several new projects for construction and provision has been made in the estimates for starting work on 4 projects and a regulating reservoir on 1 of the older projects. The new projects included in the budget are the Palo Verde project on the lower Colorado River; the Santa Maria project in California; the Michaud Flats project in Idaho and the Foster Creek division of the Chief Joseph Dam project in Washington.

When completed these projects will improve the irrigation water supply for 36,830 acres already irrigated and bring the water supplies to 18,585 acres.

Construction will also be initiated in 1956 on the Haystack Regulating Reservoir to improve service for the 50 thousand acres of the completed north unit of the Deschutes project in central Oregon.

OPERATION AND MAINTENANCE

We are requesting $24 million to finance the operation and maintenance program in 1956. This is an increase of $2.5 million over the $21.5 million available for this purpose in the current year. These funds will operate and maintain 38 projects or divisions of projects and 19 Missouri River Basin units.

The increased funds are required to operate additional power facilities going into operation for the first time and to meet the growing cost of wheeling and purchase of power.

Important Bureau powerplants coming into operation this year are the Eklutna plant in Alaska, which began producing power in January; the Folsom and Nimbus plants in California on the Central Valley project, both of which began partial operation this spring and the two units at the Alcova powerplant on the Kendrick project in Wyoming, which are expected to be in service this summer.

Due to the transfer of additional projects to the water users, the irrigation portion of the operation and maintenance estimate is less in fiscal year 1956 than in fiscal year 1955, even though 204,000 acres will receive water for the first time in 1956.

TRANSFER OF PROJECTS

Chairman HAYDEN. I am glad to hear you say that you are transferring operation and maintenance projects over to the various water users associations.

Mr. NIELSEN. We are doing that as rapidly as we can.

Chairman HAYDEN. How many transfers did you make this past year?

Mr. NIELSEN. I will have to get that for the record, Mr. Chairman.

Chairman HAYDEN. If you would, please.

(The material referred to follows:)

Transfers to water user operations during fiscal year 1955

	Acreage
Gila-Wellton-Mohawk unit, Arizona (blocks 1 and 2)	22,750 9,435
Deschutes, north unit, Oregon	50,000
Boise, Payette division, Idaho	58,582
Klamath, main division, Oregon	39,364
Orland, Calif	19,431
Missoula Valley, Big Flat unit, Montana	977
Vale, Agency Valley Dam, Oreg	-------
Owyhee, Owyhee Dam and Reservoir, Oreg	-------
Minidoka, office building, yards, certain electrical distribution system, Idaho	-------
Total	200,539

FIRST TRANSFER SUCCESSFUL

Chairman HAYDEN. I might say that I was the author of the first act of Congress to authorize the transfer of a project to the water users. That was the Salt River project. I have never had reason to regret it.

Mr. NIELSEN. That has been very successful.

Chairman HAYDEN. It has been very successful. I think as soon as you can get away from Washington management or Denver management of a project and let the water users handle it under a satisfactory contract, that is the way to carry on.

Mr. NIELSEN. Shall I proceed, sir?

Chairman HAYDEN. Yes.

GENERAL ADMINISTRATIVE EXPENSES

Mr. NIELSEN. Our request for general administrative expense funds of $3,700,000 is $300,000 less than the $4 million appropriated for the current fiscal year. The difference is due to funds transferred to the Office of the Solicitor this year.

In 1956 it is planned to continue the Washington office and the field activities financed with this appropriation at about the same level as this year. These funds, nonreimbursable in nature, are used finance the general administration work, including necessary relations with other Government agencies, inspection, and other administrative activities associated with projects turned over to the water users, the audit of operating project accounts, and general direction of the three major programs of the Bureau.

Chairman HAYDEN. The committee is to understand that the Solicitor's office will handle all of your legal work?

Mr. NIELSEN. Yes, sir.

Chairman HAYDEN. He will detail someone who knows about your problems and work with you, but he is the Solicitor's man and not your man?

Mr. NIELSEN. That is correct.

Chairman HAYDEN. How does it work?

Mr. NIELSEN. I should say it is working satisfactorily, sir.

Chairman HAYDEN. It is one of those experiments that Congress decided to undertake. We will see how it does work. Certainly

there are special things that a lawyer must know if he handles your business that a lawyer from some other agency would not know about?

Mr. NIELSEN. Yes, sir; and specialized attorneys are available to us.

EMERGENCY FUND

Our emergency fund request for 1956 for $700,000 is designed to insure a balance in this fund of approximately $1 million, the amount of the initial appropriation in fiscal year 1949.

Chairman HAYDEN. I asked to have supplied for the record how much you actually expended on the emergency fund.

Mr. NIELSEN. We will have that prepared, sir.

Chairman HAYDEN. I think the last 10 years would be sufficient.

Mr. NIELSEN. We will do that, sir.

(The information requested appears on p. 46.)

GENERAL INVESTIGATIONS

JUSTIFICATION

Chairman HAYDEN. Does that complete your statement?

Mr. NIELSEN. Yes, sir.

Chairman HAYDEN. The first item to be considered is "General investigations."

I will insert the justification in the record at this point.

(The justification referred to follows:)

GENERAL INVESTIGATIONS

Appropriation, fiscal year 1955	[1] $3, 726, 310
Prior year balance available	[2] 61, 464
Contributions	[3] 460, 822
Total obligations, fiscal year 1955	4, 248, 596
Estimate of appropriation, fiscal year 1956	5, 175, 000
Contributions	475, 000
Total obligations, fiscal year 1956	5, 650, 000

[1] Does not include $23,690 transferred to the Office of the Solicitor, Department of the Interior.
[2] Does not include $72,739 prior year balance of advance to Assistant Commissioner and Chief Engineer's Office, Denver, Colo., and centralized project activities in regional offices, and $17,541 outside reimbursements.
[3] Includes $3,579 prior year unobligated balance.

JUSTIFICATION OF ESTIMATE

Description

The appropriation for general investigations provides for the planning of the basin and project developments of the Bureau of Reclamation for the utilization of the water resources of the 17 Western States, except in the Missouri River Basin where investigations of potential developments are made with construction and rehabilitation allotments.

The program of general investigations includes:

(1) Engineering and economic investigations to determine the feasibility of potential reclamation projects in the 17 Western States and, beginning in fiscal year 1956, the Territory of Hawaii.

(2) Advance planning to prepare newly authorized projects for construction;

(3) Investigations of existing projects necessary for rehabilitation, financial adjustments or water conservation;

(4) and beginning with the Appropriation Act for fiscal year 1949, the Congress has made small annual appropriations to the Bureau of Reclamation for investigations in Alaska relating to development of water resources as a basis for legislation.

In the past, the general investigations program included small allowances for necessary transfers of funds or reimbursements to other agencies, such as the Geological Survey, Fish and Wildlife Service, National Park Service, Weather Bureau, Coast and Geodetic Survey, Department of Agriculture, etc., for work over and above their regular programs which those agencies perform in connection with the Bureau's investigations of specific potential projects and which these other agencies are better equipped to do. The request for fiscal year 1956 includes funds for this same purpose and in addition, it includes for the first time a request for funds for transfer to the Fish and Wildlife Service for basinwide studies of that agency in connection with basin investigations by the Bureau of Reclamation.

Work underway and proposed

The general investigation program for the current fiscal year is $4,248,596, which is financed with appropriated funds in the amount of $3,787,774 and contributions of $460,822. With these funds, planning activities will be under way on a total of 116 investigations, exclusive of stream gaging activities only. Of this total, 87 will be a continuation of studies under way at the beginning of the fiscal year and 29 will be investigations being initiated or resumed. Forty-three of these investigations will be completed.

The estimated appropriation of $5,175,000 for general investigations for fiscal year 1956 includes $532,188 from the Colorado River development fund, for investigations in the States of the upper division of the Colorado River Basin (this amount includes $500,000 as authorized by the Boulder Canyon Adjustment Act of 1940, to be provided annually from the revenues of the Boulder Canyon project as a special fund for the development of projects in the Colorado River Basin and unappropriated balance of $32,188); $100,000 from the general fund of the Treasury for Alaskan investigations, $50,000 from the general fund for investigation of projects in Hawaii as authorized by Public Law 634, 83d Congress, and $4,492,812 from the reclamation fund.

The request for fiscal year 1956 plus contributions in the amount of $475,000 will be utilized for planning activities on a total of 106 investigations of which 71 will be continuations of prior year investigations and 35 will be initiation or resumption of new investigations. Of the total, 35 will be completed in fiscal year 1956. The activity breakdown of work proposed in fiscal year 1956 compared with the program for fiscal year 1955 is shown in the following summary by activities, and the details of the program proposed is presented in the accompanying tabulation entitled "Schedule of General Investigations Program, Fiscal Years 1955 and 1956."

Summary by activities

Activity	Estimated costs of investigations in the current program				
	Estimated total	Total June 30, 1954	Program fiscal year 1955	Estimate fiscal year 1956	Balance to complete
1. Engineering and economic investigations	$61,958,904	$25,905,776	$3,566,741	$4,630,500	$27,855,887
2. Advance planning	23,206,877	4,524,501	704,006	890,000	17,088,370
3. Investigation of existing projects	539,677	145,906	58,891	29,500	305,380
4. Alaskan investigations	5,572,956	488,478	108,729	99,800	4,875,949
Total cost	91,278,414	31,064,661	4,438,367	5,649,800	50,125,586
Adjustments for service facilities, stores, transfers, credits, and other expenditures, and unliquidated obligations			−189,771	200	
Total obligation program			4,248,596	5,650,000	
Less: Unobligated carryover and funds advanced		(1)	−522,286	−475,000	
Appropriation or estimate		(2)	3,726,310	5,175,000	

[1] Does not include $72,739 prior year balance of advances to Chief Engineer, Denver, Colo., and centralized project activities in the regional offices, and $17,541 outside reimbursements.
[2] Does not include $23,690 transferred to the office of the Solicitor, Department of the Interior.

1. Engineering and economic investigations

DETAIL BY ACTIVITY

Subactivity	Total estimated cost	Total to June 30, 1954	Program, fiscal year 1955	Estimated, fiscal year 1956	Balance to complete
A. Reconnaissance	$1,833,093	$569,540	$248,070	$156,500	$858,983
B. Basin surveys	11,529,497	6,449,064	735,110	626,000	3,719,323
C. Project investigations	46,651,585	17,878,596	2,493,346	3,705,000	22,574,638
D. General engineering and research	1,944,734	1,008,576	90,215	143,000	702,943
Total cost	61,958,904	25,905,776	3,566,741	4,630,500	27,855,887

A. Reconnaissance

The cost program for reconnaissance is $248,070 in fiscal year 1955 and the estimate for fiscal year 1956 is $156,500. These funds are concentrated mainly on studies for several potential projects in the upper Colorado River Basin for which data are needed by the upper basin States in connection with the planning for use of each State's share of the waters of the upper Colorado River Basin. Data are needed especially for projects in Wyoming where it is becoming increasingly difficult to program expenditures of that State's share of the Colorado River development fund because of lack of reconnaissance studies. Local interests are contributing 50 percent of the funds for a reconnaissance of the Calleguas Creek Basin in California in fiscal year 1955.

B. Basin surveys

The fiscal year 1955 cost program for basin surveys is $735,110 and the estimate for fiscal year 1956 is $626,000. The fiscal year 1955 program includes a total of $301,098 for completing the fieldwork on the cooperative report on the investigation of the Arkansas-White and Red Basin. A total of 14 basin surveys will be active of which 4 will be completed.

The fiscal year 1956 estimate provides funds for completion of 1 survey and continuation of 9 other basin surveys underway. The major portion of the request will be concentrated on surveys in California, the Pecos River Basin in the Southwest and upper Snake River Basin where such studies have been deferred for several years because of lack of funds. The decrease in funds is primarily attributable to the completion of the AWR investigation in fiscal year 1955.

It is important that these new basin surveys be undertaken promptly. They should be made before project investigations are undertaken to insure that water resources development proceeds under a comprehensive plan that provides for optimum use. Completion of basin surveys for all major basins in the West is an important goal to provide a uniform basis for project selection.

C. Project investigations

The fiscal year 1955 cost program for project investigations is $2,493,346 and the estimate for fiscal year 1956 is $3,705,000. The fiscal year 1955 program provides for continuation of work on 30 investigations and the initiation or resumption of investigations on 11 potential projects. Of these 16 will be completed. The fiscal year 1956 program will permit work to continue on 22 investigations and to initiate or resume 27 project investigations. Some 19 of those investigations will be completed. The increase of the fiscal year 1956 program over the fiscal year 1955 program is required to (1) provide for an adequate program of investigations on the large Gulf Basin project in Texas which was initiated in fiscal year 1955, (2) begin feasibility studies of several potential projects in the Arkansas-White-Red River Basin on which basin studies are to be completed by the beginning of the fiscal year, and (3) to initiate investigations on a limited number of other high-priority potential projects.

An adequate program of investigations of potential projects is essential and should continue so that plans can be made which will place them in readiness for authorization for construction and maintain an adequate backlog of planned projects.

D. General engineering and research

The fiscal year 1955 cost program for general engineering and research is $90,215 and the estimate for fiscal year 1956 is $143,000. Most of the increase is to resume hydrometeorological studies by the Cooperative Studies Section of the Weather

Bureau, which are inactive at present because of lack of sufficient funds. It is highly essential that the general engineering and research investigations of the technical problems of reclamation be continued and expanded. Expansion of these studies is urgently needed because the easily developed reclamation projects have long since been completed, largely by private capital. Primarily the remaining potential developments involve large and complex undertakings. The current and prospective reclamation projects present more severe requirements on planning, design, and construction, and operation than those of the past, to such extent that the limit of available basic technical knowledge has been approached. For further safe and economical planning and construction, this knowledge must be extended by basic engineering research on the more difficult problems.

2. Advance planning

Total cost, advance planning:	
Total estimated cost	$23,206,877
Total to June 30, 1954	4,524,501
Program, fiscal year 1955	704,006
Program, fiscal year 1956	890,000
Balance to complete	17,088,370

The fiscal year 1955 cost program for advance planning is $704,006, of which $320,000 are contributed funds, and the estimate for fiscal year 1956 is $890,000, including $400,000 of contributed funds. Local interests are contributing all of the funds for advance planning for the Ventura project in California in both fiscal year 1955 and fiscal year 1956.

The fiscal year 1955 advance planning program includes three new authorized projects which are included in the fiscal year 1956 construction estimate. In addition advance planning will be underway on nine other authorized projects which have not been advanced to the construction stage.

Of the $490,000 requested for this activity in fiscal year 1956, $400,000 will be required to advance the preconstruction work on Trinity River division of the Central Valley project to the point where construction can be started in fiscal year 1957. The balance will be used for a minimum program on six other authorized projects awaiting construction funds.

These advance planning investigations should proceed to make the projects ready for early construction in order to supply needed additional water supplies for various uses.

3. Investigations of existing projects

Total cost, investigations of existing projects:	
Total estimated cost	$539,677
Total to June 30, 1954	145,906
Program, fiscal year 1955	58,891
Program, fiscal year 1956	29,500
Balance to complete	305,380

The fiscal year 1955 cost program for investigations of existing projects is $58,891 and the fiscal year 1956 estimate is $29,500. These rehabilitation surveys and financial adjustment studies are made on existing Federal reclamation projects to plan for their physical and financial rehabilitation and betterment. This program should not be curtailed further as these studies are required to protect the interests of the Government and its investment in reclamation projects by making plans to keep these projects in good operating condition.

4. Alaskan investigations

Total cost, Alaskan investigations:	
Total estimated cost	$5,572,956
Total to June 30, 1954	488,478
Program, fiscal year 1955	108,729
Program, fiscal year 1956	99,800
Balance to complete	4,875,949

The fiscal year 1955 cost program for Alaska investigations is $108,729 and the fiscal year 1956 estimate includes $100,000 (cost program will be $99,800) to be obligated for these investigations. The use of the $100,000 in fiscal year 1956, however, is contingent upon enactment of basic authorization of the Alaskan program in accordance with a proviso in the proposed language of the 1956 appropriation act. The funds requested for fiscal year 1956 are required mainly for completion of the Lawing project, a potential power project on the Kenai Peninsula about 21 miles from Seward, which would provide electric power for a

power-deficient area, and could contribute greatly toward a sustained economy and growth of this section of Alaska.

A small amount is required also for studies of the Matanuska Valley project, a potential irrigation project.

Alaska's population during the last decade increased more than 77 percent. With such population growth there are insufficient homes, schools, commercial establishments, public utility services, and service industries. Electric services are limited, and many dwellers in the suburban rural areas are unable to obtain electric service. Until substantial blocks of low-cost energy are made available, most of Alaska will suffer the inconvenience of relative curtailment in electric power supply. For the same reason, industrial expansion of the Territory is severely handicapped for need of electrical energy.

A vast water-power potential exists in Alaska, conservatively estimated to be in excess of 46 billion kilowatt-hours annually. Its importance to world economy cannot truly be evaluated. Development of this water power is essential in the future economic welfare of the country. Today little factual information exists, and comprehensive studies are a prerequisite to the planning of its use. It is important that this minimum program of investigations be continued, since these investigations will contribute materially toward permanent settlement, encourage industrial development, and accelerate use and aid in the development of other Alaskan natural resources.

JUSTIFICATION

The need for development of western water resources is mounting because of population increases in the West are straining power and municipal water supplies and local food production is unable to keep pace with the demand due to a lack of sufficient developed irrigation water supplies. The situation has been seriously aggravated in recent years by the drought period that most of the West is experiencing which has revealed the urgent need for supplemental water for land which is now only partially productive because of an insufficient water supply. The West faces a vanishing gap between the ever-mounting use of water and the known easily available supply. In many areas, the situation is critical or rapidly becoming so because, owing to the mounting competitive uses of water, many places face arrested economic growth now and others will face it in the not-too-distant future.

In the face of ever-increasing demands for further development of western water resources, the Bureau, as the primary Federal agency responsible for such activities, as well as those concerned with reclamation problems are becoming increasingly concerned with the present status of Reclamation's program and its ability to meet those needs under conditions existing at the present time. Although the Bureau's construction program has been curtailed in recent years to the point where it is quite small in comparison with the needs throughout the West, the Bureau has practically no backlog of well-planned authorized projects that can be placed under construction on relatively short notice. The effects of this situation is now being felt but will become more and more critical in the immediate future as the smaller projects are completed and the work is concentrated more and more on the few remaining large projects. Even if additional funds are made available for construction purposes, the opportunities for improving this situation are poor because there is no significant backlog of authorized well-planned projects which have not already been placed under construction. At the present time there are only 9 projects in this category and these projects have a combined total estimated cost of only about $189 million. Not only is this equivalent to only about 1½ years of construction at the present rate but about 70 percent is concentrated on 3 projects.

The key to the correction of this serious situation is an adequate and uniform planning program. The appropriations for the general investigations activities has fluctuated considerably in recent years, but each year for the past 5 years the appropriations have been progressively lower than the year before except for the current fiscal year when this situation was improved somewhat by a supplemental appropriation. With the limited funds available and the increasing pressure to undertake new developments, the Bureau has stressed the importance of efficient utilization of the available dollars primarily by concentration on a limited number of the better potential projects. As evidence of its sucess in this respect, the Bureau had underway in fiscal year 1954 a total of only 106 investigations. This was increased slightly to 116 in fiscal year 1955 as a result of an increase of over 30 percent in appropriated funds and is scheduled to be reduced to 108 in fiscal year 1956, even though an increase of about 36 percent in the appropriated funds is being requested for that year. Despite the more efficient use of the funds, the investigation program has been entirely inadequate to even keep pace with the present construction program. During the past 10 years the funds appropriated

for construction and rehabilitation have averaged about $179 million. During this same period the rate at which new works have been planned and authorized has been only about $137 million per year or about 75 percent of the rate at which works were being constructed. Under these conditions, it has not only been impossible to build up a shelf of planned projects from which Congress could select new starts but the reclamation construction program will come to a halt in the near future if the present trend continues, unless new construction starts were made on unplanned projects.

The appropriation request for fiscal year 1956 for this activity represents the minimum amount of funds required if the dangerous trend of past years is to be reversed. With that amount and if the program is continued in the future at about the same rate, it will be possible to investigate, plan and present to Congress for authorization additional water resource development projects at a rate which will keep pace with the construction program. In addition, it will permit the gradual accumulation of a shelf of projects which will permit careful selection for prudent investment of Federal funds and which could be placed under construction on relatively short notice if economic conditions so dictate.

Itemization of estimate, general investigations

AMOUNTS AVAILABLE FOR OBLIGATION

	Estimate, 1955	Estimate, 1956
Appropriation or estimate:		
Reclamation fund, special fund	$3,150,000	$4,492,812
Colorado River development fund	500,000	532,188
General fund	100,000	150,000
Total appropriation or estimate	3,750,000	5,175,000
Transferred to "Salaries and expenses, Office of the Solicitor, Interior"	−23,690	
Adjusted appropriation or estimate	3,726,310	5,175,000
Unobligated balance brought forward	151,744	
Reimbursements from non-Federal sources	455,822	505,000
Reimbursements from other accounts	13,500	7,000
Total obligations	4,347,376	5,687,000

OBLIGATIONS BY OBJECTS

		Estimate, 1955	Estimate, 1956	Increase (+) or decrease (−)
	Direct obligations			
01	Personal services	$3,430,752	$4,286,980	+$856,228
02	Travel	205,108	245,562	+40,454
03	Transportation of things	23,636	18,060	−5,576
04	Communication services	38,604	43,144	+4,540
05	Rents and utility services	28,062	34,747	+6,685
06	Printing and reproduction	53,857	70,046	+16,189
07	Other contractual services	344,750	635,551	+290,801
	Services performed by other agencies	57,004	132,459	+75,455
08	Supplies and materials	95,777	120,920	+25,143
09	Equipment	54,845	88,794	+33,949
10	Lands and structures	204	234	+30
13	Refunds, awards, and indemnities	197	643	+446
15	Taxes and assessments	3,580	5,860	+2,280
	Subtotal	4,336,376	5,683,000	+1,346,624
	Deduct charges for quarters and subsistence	2,500	3,000	−500
	Total direct obligations	4,333,876	5,680,000	+1,346,124
	Obligations payable out of reimbursements from other accounts			
01	Personal services	2,000	2,500	+500
02	Travel	600	500	−100
07	Other contractual services	1,250	1,650	+400
08	Supplies and materials	250	350	+100
09	Equipment	9,400	2,000	−7,400
	Total obligations payable out of reimbursements from other accounts	13,500	7,000	−6,500
	Total obligations	4,347,376	5,687,000	+1,339,624

Changes subsequent to printing of the Budget of the United States 1956

	1955	1956
Total direct obligations (itemization of estimate)	[1] $4,333,876	$5,860,000
Reimbursements from non-Federal sources: Project investigations from $455,822 to $460,822 in 1955 and from $505,000 to $475,000 in 1956	+5,000	−30,000
Total direct obligations (revised)	[1] 4,338,876	5,650,000

[1] Includes $72,739 prior year balance of advances to Assistant Commissioner and Chief Engineer's Office, Denver, Colo., and centralized project activities in the regional offices, and $17,541 outside reimbursements.

Statement of appropriations by fiscal years

1946	$4,750,000	1951	5,635,000
1947	5,500,000	1952	4,500,000
1948	2,500,000	1953	4,000,000
1949	4,550,000	1954	3,000,000
1950	4,950,000	1955	[1] 3,750,000

[1] Includes $23,690 transferred to Office of the Solicitor.

PREPARED STATEMENT

Chairman HAYDEN. Whoever will testify on that might make a general statement.

Mr. NIELSEN. Mr. Bennett will testify.

Mr. BENNETT. I have a general statement, if you would like to have it, and I will highlight it.

Chairman HAYDEN. Very well.

(The statement referred to follows:)

STATEMENT BY N. B. BENNETT, JR.

GENERAL INVESTIGATION PROGRAM

The general investigation activity involves the investigation and planning of potential water conservation and utilization projects throughout the 17 Western States except in the Missouri River Basin. This activity also includes a relatively small program of investigations in the Territory of Alaska and beginning in fiscal year 1956 a small amount of funds is being requested for planning work in the Territory of Hawaii.

The general-investigation program consists of four major types of activities, engineering and economic investigations, advance planning, investigations of existing projects, and Alaskan investigations. The first activity, engineering and economic investigations, comprises the bulk of the program. These investigations may be reconnaissance surveys of a preliminary nature to determine with the minimum of time and funds whether more detailed studies of projects or basins are justified, basin surveys to evaluate the potential developments within entire river basins to establish an overall plan and the framework for further development; and detailed investigations of specific projects to establish feasibility as a basis for recommending authorization. This activity also includes a very modest program of studies of difficult or complex problems which are encountered in the planning, designing or construction of reclamation projects and which are not identifiable with any specific developments. The second major activity, advance planning, involves the collection of design data, preparation of final designs and other similar detailed preconstruction work on projects which have been authorized for construction but are awaiting the initial appropriation of construction funds. The investigation of existing projects involves studies of the need for rehabilitation or water conservation improvements on existing Bureau projects. Under the fourth activity, Alaskan investigations, studies are being made of the potential developments in Alaska as a basis for appropriate legislation.

The Alaskan investigation program, ever since July 1948 when this program was started, has been carried forward on a year-to-year basis, based on language appearing in the annual appropriation acts. No basic authorization of a continuing nature has been provided. In the President's budget for fiscal year 1956 the

language that has appeared in prior appropriation acts has been deleted on the assumption that basic authorization will be available by the beginning of fiscal year 1956 and in its place a proviso has been proposed to the effect that "pending the enactment of authorizing legislation with respect to investigations in Alaska, no part of this appropriation shall be expended in the conduct of such activities." The net effect of this change is to preclude the use of the $100,000 being requested for this program until such time as basic authorization is available. Legislation for such authorization was introduced in the House of Representatives, hearings were held by the House Committee on Interior and Insular Affairs, and an amended bill was favorably reported out by that committee last March. No further action has since been taken.

In regard to the other item, about $96,000 of the $100,000 being requested for this program was originally scheduled for completion of a feasibility study of the Lawing project, a hydroelectric development near Seward, Alaska. The city of Seward, however, recently took steps looking toward development of this power project with private financing and, in line with the administration's policy of encouraging local interests to undertake water resource developments where they are willing and able to do so, the Bureau has since abandoned its study of the project. In its place, we intend to utilize the funds to undertake a study of the Caribou project, a 30,000-kilowatt development near Palmer, Alaska which will serve the needs of the expanding greater Anchorage area.

In regard to the Hawaiian investigation program to which I referred earlier, the last session of Congress authorized the Secretary of the Interior to make investigations of the development possibilities of the Waimanolo, Waimea, and Molokai projects in the Territory of Hawaii. We have since found that actual construction of the Waimanolo project is now complete and no investigation is therefore needed. The $50,000 included in the fiscal year 1956 request is, therefore, for the purpose of providing technical assistance to the Hawaii Irrigation Authority and reviewing their reports on the Waimea and Molokai projects.

The Bureau of Reclamation is requesting $5,175,000 for fiscal year 1956 to continue the investigation program. This is an increase of about 38 percent over the appropriation of $3,750,000 for the current fiscal year. Included in the fiscal year 1956 request, however, are two items which have not been in the Bureau's request before. One item is the request for $50,000 for investigations in the Territory of Hawaii previously referred to. The other item is funds which will be transferred to the Fish and Wildlife Service for studies by that agency of fish and wildlife aspects of basin investigations undertaken by the Bureau. In the past it has been the practice for the Bureau to finance only those studies undertaken by the Fish and Wildlife Service in connection with specific Bureau projects, while the Fish and Wildlife Service obtained a direct appropriation for basin survey studies. The amount of the funds that will be required by the Fish and Wildlife Service in fiscal year 1956 is still under discussion, but it appears that it will be in the neighborhood of $125,000 whereas the amounts scheduled for transfer this fiscal year amount to only about $41,000.

Each year since fiscal year 1951, the appropriation for "General investigations" has been less than the year before except for the current fiscal year when this situation was reversed somewhat as a result of passage of a supplement appropriation. Most of the Bureau's projects now under construction are nearing completion, and, exclusive of the Missouri River Basin project, the major portion of the remaining work is concentrated on five major projects. The Bureau does not have a backlog of authorized projects that can be placed under construction. At the present time, there are only nine authorized projects outside the Missouri River Basin that have not already been placed under construction. These 9 projects have a combined total estimated cost of only about $189 million, which is equivalent to less than 2 years of construction at the present rate. Under these circumstances there is always the possibility that, due to the pressure for new irrigation developments, projects will be authorized and the initial appropriation for construction made before firm plans have been developed and feasibility clearly established.

The need for a backlog of planned projects was recognized by the Bureau of the Budget in its instructions governing the preparation of the fiscal year 1956 request. These instructions provided that "Where agencies do not have a large backlog of authorized projects, emphasis will be given to general investigations and surveys and such preliminary plans as are necessary to determine the suitability of projects for authorization. With respect to both general investigations and advance planning high priority should be given to relatively small projects having a wide geographical dispersion, which are urgently needed, and on which construction

could be started quickly, and could be completed at an economic rate within 18 months or less."

The allotment request for fiscal year 1956 is also more nearly commensurate with the needs for development of western water resources. The available power and municipal water supplies, as well as local food production, have not kept pace with the tremendous population growth that has taken place throughout the West in the past two decades. Owing to mounting competitive uses, many areas face arrested economic growth now and others will face it in the not too distant future. The situation has become more critical in the last 2 years because of the current drought that is plaguing the West. This drought has not only increased the pressure for new developments but has highlighted the urgency of finding supplemental water to maintain production on many existing developments.

I would like to point out the needs of the Bureau for an adequate planning program but also a stable planning program in the interest of efficient operations. In the past, the appropriations for the planning activity have fluctuated widely from year to year. Since the major portion of our planning funds are utilized for personal services, the size of the planning staff has of necessity varied in almost direct proportion to the appropriations. With each increase in funds it has been necessary to recruit and train additional personnel to carry out the program, fully cognizant of the likelihood that a reduction in funds in the near future would necessitate retrenchment and loss of the investment in their training. The situation has been especially critical in recent years because of the drastic curtailment of funds. Since fiscal year 1951, the appropriations for "General investigations" have been reduced from $5,875,000 to $3,750,000 for the current fiscal year. As a result the planning organization has been badly disrupted, and many valuable employees with as many as 25 to 30 years experience with the Bureau have been lost. Under these conditions our planning activities have to be carried forward on a year-to-year basis rather than geared to a long-range plan. A stable program would contribute immeasurably toward efficient operations.

ALASKA PROGRAM

Mr. BENNETT. I would like to go into two items in connection with the Alaska program, first. That program since July 1948 has been carried forward on a year-to-year basis, based on language appearing in the annual appropriation act.

No basic authorization of a continuing nature has been provided.

LANGUAGE PROVISION

In the President's budget for fiscal year 1956, the language that has appeared in prior appropriation acts has been deleted on the assumption that basic authorization will be available by the beginning of fiscal year 1956 and in its place a proviso has been proposed to the effect that:

> Pending the enactment of authorizing legislation with respect to investigations in Alaska, no part of this appropriation shall be expended in the conduct of such activities.

Chairman HAYDEN. What is the status of that legislation?

Mr. BENNETT. A bill was introduced in the House, hearings have been held by the House Interior and Insular Affairs Committee, and a bill reported out.

I understand that about 2 weeks ago the Rules Committee gave the bill a rule, but nothing has been taken up on the floor.

Chairman HAYDEN. What has been done before the Senate committee?

Mr. BENNETT. Nothing. The Senate committee has not yet taken it up nor do they have a bill before them.

The net effect of this change is to preclude the use of the $100,000 being requested for this program until such time as the basic authorization is available.

The program which you have before you for Alaska shows about $96,000 of the $100,000 being requested scheduled for completion of a feasibility study of the Lawing project, a hydroelectric development near Seward, Alaska. The city of Seward, however, recently took steps looking toward development of this power project with private financing and, in line with the administration's policy of encouraging local interests to undertake water resource developments where they are willing and able to do so, the Bureau has since abandoned its study on the project.

CARIBOU PROJECT

In its place, we intend to utilize the funds to undertake a study of the Caribou project, a 30,000-kilowatt development near Palmer, Alaska, which will serve the needs of the expanding greater Anchorage area.

Chairman HAYDEN. Is that the Caribou River?

Mr. BENNETT. It is on the Caribou Creek, sir.

Chairman HAYDEN. As to the private power development, from what you can hear, does it look as though private industry would develop the plant originally contemplated?

Mr. BENNETT. It is not the plan which we contemplated. Our plan went to 2 powerplants on 2 different lakes. They would develop only one of them at this time.

The one is substantially in the same plan which we had.

Chairman HAYDEN. I assume one of them would supply the immediate demand for power and the other would be built later?

Mr. BENNETT. Yes.

Chairman HAYDEN. There is a demand for power?

Mr. BENNETT. Yes, sir.

In our general investigations request for fiscal year 1956 we have two items which have not appeared in there before. One is the request for $50,000 for the Hawaii investigations.

The other is the transfer of funds to the Fish and Wildlife Service for studies by that agency of their basin investigations which they undertake.

In the past it has been the practice for the Bureau to finance only those studies undertaken by the Fish and Wildlife Service in connection with specific Bureau projects, while the Fish and Wildlife Service obtained a direct appropriation for basic survey studies.

This year the request for those basin survey studies is in our request.

Chairman HAYDEN. That moves the same amount of money from one place to another?

Mr. BENNETT. That is about what it amounts to; yes, sir.

SOURCE OF GENERAL INVESTIGATION CONTRACTS

Chairman HAYDEN. I note that you expect to receive contributions for general investigations totaling about $473,000. What is the source of those contributions?

Mr. BENNETT. That comes from 2 or 3 different places in fiscal year 1956. We are getting $25,000 for a study of the Cachuma

project extension in California; $50,000 on the lower Rio Grande project in Texas, and $400,000 on the Ventura project, California.

Chairman HAYDEN. Those are very substantial contributions?

Mr. BENNETT. Those are the only ones which at this date are firm. We have others pending.

ADVANCE PLANNING

Chairman HAYDEN. Of the total estimate of appropriated funds for advanced planning, I note $400,000 is for the Trinity River division in the Central Valley project, and the balance of $90,000 is divided among 5 other projects. Is this all of the projects in which you could wisely use advanced planning money?

Mr. BENNETT. Yes, sir. Our advanced planning money is limited to those projects which are authorized and not yet under construction. The others will be substantially completed and ready for construction by the end of this fiscal year.

Chairman HAYDEN. You may proceed with your statement.

Mr. BENNETT. Mr. Nielsen covered in general terms our need for a stable investigation program. As you know, the investigation work runs about 80 percent personal services. Any time we have a variation in the amount of money it simply means a variation in the number of people. We can cut off quickly, but we cannot rise fast.

It takes time to find the people and time to train them properly. That is a major consideration in securing a stable appropriation for investigations.

Chairman HAYDEN. I think the United States has been complimented around the world for having two engineering organizations that have existed long enough and retained stability enough to make them the best in the world. The one is the United States Bureau of Reclamation, and the other is the Corps of Engineers.

But those organizations cannot be kept up to the standard that they should have unless there is continuous employment for the men with the skill and ability that is associated with them. If you cut this money one year and let the men go, you cannot get them back.

The same is true with the Corps of Engineers.

Mr. BENNETT. It certainly is true. You just cannot program your work on a sound basis under that type of fluctuation.

This concludes my statement on the general investigations items.

OPERATION AND MAINTENANCE

Chairman HAYDEN. We will now go to operation and maintenance.

Mr. NIELSEN. Mr. Dominy will testify on that, Mr. Chairman.

Chairman HAYDEN. For the current fiscal year, $21,500,000 was appropriated for operation and maintenance, the budget estimate for the fiscal year 1956, $24 million, an increase of $2.5 million.

JUSTIFICATION

I will make the justification a part of the record at this point.

(The justification referred to follows:)

Operation and Maintenance

Summarized financial data

Total, fiscal year 1954	$19,952,978
Fiscal year 1955:	
Allotment	[1] 21,424,375
Unobligated balance	−160,000
Funds advanced by water users	1,843,253
Total obligations, fiscal year 1955	23,107,628
Fiscal year 1956:	
Allotment	24,000,000
Funds advanced by water users	1,624,465
Total obligations, fiscal year 1956	25,624,465

[1] Excludes $75,625 transferred to "Salaries and expenses, Office of Solicitor, Interior," pursuant to Public Law 465.

Schedule of operation and maintenance program fiscal years 1954, 1955, and 1956—Consolidation

Program item	Total prior year 1954	Program current year 1955	Program budget year 1956
(1)	(2)	(3)	(4)
MULTIPURPOSE FACILITIES			
Operation and maintenance:			
Storage system	$1,623,377	$1,633,848	$2,048,216
Primary pumping	355,614	400,296	405,892
Carriage system	829,068	821,457	921,747
Replacements and improvements	43,180	101,069	307,240
Total obligations, multipurpose	2,851,239	2,956,670	3,683,095
IRRIGATION FACILITIES			
Operation and maintenance:			
Storage system	201,010	222,307	184,004
Primary pumping	304,466	520,113	507,250
Carriage system	1,167,368	1,443,899	1,397,196
Distribution system	2,119,267	2,286,877	2,174,605
Drainage system	253,776	304,649	293,934
Replacements and improvements	424,107	602,881	529,721
Total obligations, irrigation	4,469,994	5,380,726	5,086,710
MUNICIPAL WATER SUPPLY FACILITIES			
Operation and maintenance: Storage system	4,997	5,000	3,000
Total obligations, municipal water supply facilities	4,997	5,000	3,000
POWER FACILITIES			
Operation and maintenance:			
Electric generation	5,056,859	5,495,892	5,812,511
Other production expense	1,933,077	1,680,023	1,789,230
Transmission and distribution expense	3,334,872	5,990,414	6,694,174
Replacements and improvements	696,108	471,641	1,450,983
Subtotal	11,020,916	13,637,970	15,746,898
Project energy interchange (net)	−795,577	−529,000	−579,000
Total obligations, power facilities	10,225,339	13,108,970	15,167,898

Schedule of operation and maintenance program fiscal years 1954, 1955, and 1956—Consolidation—Continued

Program item	Total prior year 1954	Program current year 1955	Program budget year 1956
(1)	(2)	(3)	(4)
TOWN OF COULEE DAM MUNICIPAL AND LEASING PROGRAM			
Municipal operation and maintenance	$46,210	$75,800	$56,800
Housing and commercial leases	48,228	22,200	14,200
Total obligations, town of Coulee Dam municipal and leasing program	94,438	98,000	71,000
Total obligations, all facilities	17,646,007	21,549,366	24,011,703
Other operation and maintenance activities:			
Imperial Dam	49,986	49,000	53,500
Operation of Boulder City, Nev	492,580	519,000	519,000
Colorado River front work and levee system	1,002,875	491,000	491,000
Soil and moisture conservation operations	761,530	499,262	499,262
Halogeton control operations			50,000
Total obligations	19,952,978	23,107,628	25,624,465
Allocations:			
Irrigation	5,842,729	6,801,729	6,636,105
Power	11,243,659	14,045,796	16,534,480
Municipal and industrial water	138,490	150,483	163,302
Flood control	290,118	414,034	560,635
Fish and wildlife	700	6,350	9,750
Recreation	1,579	6,800	6,400
Navigation	34,294	26,174	30,031
Town of Coulee Dam municipal and leasing program	94,438	98,000	71,000
Total obligations, all facilities	17,646,007	21,549,366	24,011,703
Other operation and maintenance activities:			
Imperial Dam	49,986	49,000	53,500
Operation of Boulder City, Nev	492,580	519,000	519,000
Colorado River front work and levee system	1,002,875	491,000	491,000
Soil and moisture conservation operations	761,530	499,262	499,262
Halogeton control operations			50,000
Total obligations	19,952,978	23,107,628	25,624,465
Method of financing:			
Allotment:			
Operation and maintenance	19,500,000	[1] 21,424,375	24,000,000
Emergency fund	7,248		
Unobligated balance, operation and maintenance	−1,554,655	−160,000	
Reimbursements from non Federal sources	10,379		
Funds advanced	1,990,006	1,843,253	1,624,465

[1] Excludes $75,625 transferred to "Salaries and expenses, Office of Solicitor, Interior," pursuant to Public Law 465.

Itemization of estimate

	Estimate, 1955	Estimate, 1956
AMOUNTS AVAILABLE FOR OBLIGATION		
Appropriation or estimate:		
Reclamation fund, special fund	$18,257,222	$20,223,638
Colorado River dam fund	1,942,778	1,697,000
General fund	1,300,000	2,079,362
Total appropriation or estimate	21,500,000	24,000,000
Transferred to "Salaries and expenses, Office of the Solicitor, Interior," pursuant to Public Law 465	−75,625	
Adjusted appropriation or estimate	21,424,375	24,000,000
Reimbursements from non-Federal sources	1,938,253	1,707,435
Reimbursements from other accounts	13,800	11,800
Total available for obligation	23,376,428	25,719,235
Unobligated balance, returned to unappropriated receipts	−160,000	
Total obligations	23,216,428	25,719,235

Itemization of estimate—Continued

		Estimate, 1955	Estimate, 1956
	OBLIGATIONS BY OBJECTS		
	Direct obligations		
01	Personal services	$15,090,588	$15,674,588
02	Travel	269,655	310,954
03	Transportation of things	122,924	141,466
04	Communication services	188,850	203,743
05	Rents and utility services	249,708	261,303
06	Printing and reproduction	21,192	26,658
07	Other contractual services	4,196,499	4,750,039
	Services performed by other agencies	114,840	95,550
08	Supplies and materials	2,376,484	2,992,723
09	Equipment	600,553	838,507
10	Lands and structures	391,110	830,507
13	Refunds, awards, and indemnities	8,572	1,273
15	Taxes and assessments	44,635	45,499
	Subtotal	23,675,610	26,172,700
	Deduct charges for quarters and subsistence	472,982	465,355
	Total direct obligations	23,202,628	25,707,435
	Obligations payable out of reimbursements from other accounts		
01	Personal services	8,700	8,700
02	Travel	100	100
08	Supplies and materials	2,000	
09	Equipment	3,000	3,000
	Total obligations payable out of reimbursements from other accounts	13,800	11,800
	Total obligations	23,216,428	25,719,235

Statement of appropriations by fiscal years

1946	$984,913	1951	15,447,000
1947	2,562,985	1952	15,977,594
1948	8,691,500	1953	19,000,000
1949	10,631,454	1954	19,500,000
1950	13,648,172	1955	[1] 21,500,000

[1] Includes $75,625 transferred to Office of the Solicitor.

General Statement

OPERATION AND MAINTENANCE, FISCAL YEAR 1956

The operations and maintenance of Federal reclamation projects after construction is completed is one of the important functions of the Bureau of Reclamation.

The fiscal year 1956 fund requirement of O. and M. activities totals $25,624,465 being comprised of $1,624,465 of advances by water users and $24 million of appropriated moneys.

The request for appropriated moneys includes $3,683,095 for the operation of multipurpose facilities, $5,086,710 for direct irrigation facilities, $3,000 for municipal water facilities, $15,167,898 for power facilities, $71,000 for the town of Coulee Dam municipal and leasing program, and $1,612,762 for other O. and M. activities which include the operation of Imperial Dam, Boulder City, Nev., Colorado River front work and levee system, soil and moisture conservation, and halogeton control operations.

Multipurpose facilities

The request of $3,683,095 for multipurpose facilities reflects the joint costs for operation and maintenance of the major dams and related facilities which serve flood control, irrigation, power, municipal water, fish and wildlife, recreation, and other related purposes. Of the amount requested, $1,549,395 is associated with irrigation activities and $1,366,582 is associated with power activities. Municipal water service accounts for $160,302 of the total and nonreimbursable functions of flood control, navigation, fish and wildlife, etc., amount to $606,816.

The operation of these multipurpose facilities is essential in connection with irrigation and power facilities operated by the Bureau, for service to facilities operated by the water users and for flood control and river regulation to downstream areas.

Irrigation facilities

The fiscal year 1956 program for the operation of irrigation facilities totals $5,086,710, a decrease in this overall activity of $294,016 from 1955. This decrease reflects in large measure the transfer of facilities to water user organizations for operation and maintenance. The direct irrigation program of $5,086,710 plus the $1,549,395 shown above as irrigation's share of the multipurpose facility operations minus $1,446,050 of funds advanced by water users reflects a net requirement of appropriated funds for all irrigation activities of $5,190,055. This net requirement for appropriated funds is $61,833 greater than the amount available in fiscal year 1955.

The committee hearing the Bureau's request for operation and maintenance funds last year urged the transfer of facilities to water users for operation and maintenance. In this respect, I wish to state that it is the continuing policy of the Bureau to transfer irrigation facilities to water user associations as soon as they are able to assume the responsibility. Mindful of the views expressed by the committee last year, we have vigorously urged the transfer of facilities on a number of projects. As of January 1, 1954, the Tucumcari project, New Mexico, was transferred to the Arch Hurley Conservancy District and the Malta and Glasgow divisions of the Milk River project were transferred to the Malta and Glasgow Irrigation Districts, respectively. Since that time all or part of the irrigation facilities of the north unit, Deschutes project, Orland project, irrigation blocks 1 and 2 of the Welton Mohawk division, Gila project, the main division of the Klamath project, the Payette division of the Boise project, Agency Valley Dam and Reservoir of the Vale project, the Owyhee Dam and Reservoir of the Owyhee project, certain electrical distribution facilities, office buildings and storage yard to the Burley Irrigation District, Minidoka project and the Big Flat unit of the Missoula Valley project have been transferred for operation and maintenance by the water user organizations. In addition, we anticipate the early transfer of the Plainview irrigation distribution system, Central Valley project for operation by the district.

A total of 73 projects have been constructed or rehabilitated by the Bureau to furnish either a full or supplemental water supply for irrigation purposes. These projects are operated as follows:

Operated by water users	42
Operated by Bureau of Reclamation	5
Operated in part by water users and in part by Bureau	26
Total	73

The 26 projects operated in part by the water users and in part by the Bureau include the Missouri River Basin project as one project which has 7 units in operation for irrigation service to all or a part of the land to be developed. One of these units is operated by the water users and 6 units are operated by the Bureau.

As construction and testing is completed, irrigation facilities are shifted from construction to an operation and maintenance status. In fiscal year 1956 a full or supplementary irrigation water supply will be furnished, for the first time under O. and M., to about 204,000 acres. This is offset by the facilities transferred to water users serving approximately 201,000 acres. Thus, in fiscal year 1956, the Bureau will operate and maintain facilities to serve approximately the same acreage as in fiscal year 1955. However, the Bureau's total activity will be greater by reason of the continued operation of storage works supplying some areas transferred.

In the construction of irrigation projects, capacity is provided in storage, diversion, and similar common facilities for serving the total acreage of the project. In the early years of project development, the area served may be only a fraction of the total area under the common facilities. The cost of operating and maintaining these common facilities is likely to be practically the same as the cost under full development when all lands are being assessed. In these early years the area served is assessed the estimated normal O. and M. that would apply if the entire area was served. The difference representing the cost of O. and M. on the extra capacity of the common facilities is funded into the project construction account. Funds in an amount of $396,510 are included under the construction and rehabilitation part of the budget for this phase of irrigation operations.

Municipal water facilities

The fiscal year 1956 program for municipal water facilities totals only $3,000 of which the entire amount is advanced by water users. The share of multipurpose facilities associated with deliveries of municipal water, all of which is returned to the Treasury, totals $160,302.

Power facilities

Due to the highly technical problems involved in the operation of power systems, including generating plants, and transmission lines which traverse not only 1 or several projects, but often more than 1 State, it is essential that the Government operate and maintain these facilities to insure adequate power service to project and other users.

The fiscal year 1956 program of $15,167,898 for the operation and maintenance of power facilities consists of $14,992,483 of appropriated moneys and $175,415 of advances by water users and is an increase of $2,058,928 over the amount available for fiscal year 1955. This increase is due to several factors. There is an increase of 120,000 kilowatts of generating capacity, i. e., an increase of from 4,849,550 kilowatts of nameplate generating capacity in fiscal year 1955 to 4,969,550 nameplate generating capacity in 29 powerplants on 17 projects in fiscal year 1956. Also the number of miles of transmission lines requiring operation and maintenance will increase from 8,190 to 8,600 miles, an increase of approximately 400 miles. Several new substations will also be added to the system. Also, the Eklutna project, in Alaska, was completed in fiscal year 1955, and funds for its operation and maintenance are included for the first time in fiscal year 1956 operation and maintenance request. Also funds are being requested for a full year's operation of Alcova, Folsom, and Nimbus powerplants as compared with only partial year's operation in fiscal year 1955.

The increase of $2,058,928 also contains an increase of wheeling and purchase power funds in the amount of $460,428 over that required for fiscal year 1955. Project power facilities replacement and improvement program has been curtailed in recent years to a point where the operating standards required commensurate with the need for a reliable electric power supply are being endangered and this budget contains an increase of $979,342 in fiscal year 1956 over that of 1955 for replacements and improvements in order to endeavor to maintain the power supply system in a reliable manner.

To meet the demands of rural cooperatives, municipalities, and other users of power, it is essential that funds be provided for the proper operation and maintenance of the Bureau power system. The program of $15,167,898 for power operation and maintenance is less than one-third of the estimated revenue of $48,587,902 from these facilities in fiscal year 1956.

Town of Coulee Dam municipal and leasing program

The request for this activity totals $71,000, a reduction of $27,000 below fiscal year 1955. Until such time as the town can be separated from Federal management, Federal funds will be required for its operation.

Other O. and M. activities

Other O. and M. activities which include the operation of Imperial Dam, Colorado River front work and levee system, the operation of Boulder City, soil and moisture conservation operations and halogeton-control operations total $1,612,762, an increase of $54,500 over the amount available in fiscal year 1955. Of this increase, $50,000 is for a new item for halogeton-control operations. These funds are for locating areas infested with this poisonous weed and for the spraying of known infestations on public lands in cooperation with other agencies.

TRANSFER OF WORKS IN ARIZONA

Mr. DOMINY. You asked specifically earlier in the hearings, Senator Hayden, for the amount we have requested from the budget, and that was given at $28,037,000.

Since that time we have been able to transfer rather unexpectedly certain works to the Wellton-Mohawk irrigation district in your State, which has undertaken the operation and maintenance of works even before the development period, which is not usually the case.

Therefore, we anticipated that we would have to operate all of the Wellton-Mohawk Division, and had that in the 28 million requested originally.

Chairman HAYDEN. How much will that Wellton-Mohawk operation relieve you?

Mr. DOMINY. $171,900 was in our original request of $28 million specifically for the Wellton-Mohawk.

In addition to that we had expected to continue operation of the Payette Division of the Boise project in fiscal 1956, but the Black Canyon Irrigation District agreed to accept that earlier than we had anticipated. Those combined items, Black Canyon and Gila, amounted to $538,900.

AMOUNT REQUESTED

So the net amount requested of the budget minus the $538,900, would be $27,498,100.

Chairman HAYDEN. You could still use that if you had it?

Mr. DOMINY. We could use that, to be sure.

The thing that I would like to make clear to the committee, in living with the ceiling on operation and maintenance, we obviously could not stop operation. We have to supply the essential operation of the powerplants and transmission lines and the irrigation facilities.

So in reducing our $28 million to the budget ceiling, it means that we have to reduce in our budget the maintenance and related items.

EFFECT OF INSUFFICIENT MAINTENANCE FUNDS

Chairman HAYDEN. Then it means if a transmission line is not properly maintained, there is a certain amount of deterioration and that ultimately must be made up at perhaps greater cost.

So you do not save any money?

Mr. DOMINY. To the extent that our judgment, as reflected from the regions and the projects was accurate in forecasting the total that we required, that is absolutely right. If we have less money than that, then there is the risk that we won't maintain it to the proper standard and suffer the increased cost later on by failure to maintain at proper standards.

The second thing we did is this: Included in this operation and maintenance heading are such things as the Colorado River front work and levee system, halogeton control, which is a new item requested for the first time in 1956 budget, and soil and moisture conservation. Those are items that are not directly related to operation and maintenance of the facilities, so we trimmed those very seriously in living with the budget.

SOIL CONSERVATION

Chairman HAYDEN. The soil conservation you are going to keep up on the same amount as last year?

Mr. DOMINY. Yes, but we had requested in our budget proposal an increase in 1956.

Chairman HAYDEN. What will you use that money for if you have it?

PROJECTS BY REGION

Mr. DOMINY. I have a separate statement here broken down by regions on each of the items for which we requested money. I will be glad to go into that in detail, or supply it for the record.

Chairman HAYDEN. You can supply it for the record.

(The information requested follows:)

Soil and moisture conservation operations for fiscal year 1956, by projects as presented to the Bureau of the Budget and as revised and presented to the Congress

	Request to Budget Bureau	Request to Congress
REGION 1		
Regional office administration	$3,500	$1,762
Regional participation in fire-prevention program on withdrawn lands	6,000	5,000
Boise project: Continue reseeding and streambank protection on withdrawn lands	20,000	8,200
Columbia Basin project: For continuation of sanddune control, seeding wind-blown areas, and noxious-weed control on public lands	16,000	15,000
Minidoka project: Water conservation and control and weed control on withdrawn lands	10,500	4,000
Mountain Home project: Continuation of reseeding of burned-over areas of development lands	5,000	3,000
Yakima project: Reseeding wind-erosion areas and seepage control	4,000	0
Subtotal, region 1	65,000	36,962
REGION 2		
Regional office administration	[1] 10,000	[1] 5,000
Central Valley project: Revegetation of public lands, principally for protection of Keswick Reservoir, erosion control and conservation survey	46,000	35,000
Klamath project: Revegetation of wind-eroded areas and land-use management program on withdrawn lands	10,000	4,000
Solano project: Land-use management on public lands	1,000	1,000
Cachuma project: Land-use management and revegetation of acquired lands	1,000	1,000
Subtotal, region 2	68,000	46,000
REGION 3		
Gila project: Vegetative planting for soil stabilization, conservation practices on development farms, and methods of water use economy	16,500	10,500
Salt River project: Salt-cedar control and canal-loss determinations	16,000	7,000
Bridge Canyon project: Maintaining cooperation with other agencies especially in securing protection of reclamation facilities from sedimentation; and an inventory of minor watersheds to determine sediment yield potential and practicability of flood-control measures	26,500	11,500
Marble Canyon project: Completion of inventory of sediment-yield potential and possibilities of sediment reduction through soil and moisture conservation operations	6,000	6,000
Subtotal, region 3	65,000	35,000
REGION 4		
Regional administration and regionwide investigations of erosion problems associated with operating projects	[2] 16,000	[2] 16,000
Regional investigations and surveys on acquired and withdrawn lands to determine conservation problems. Control of surface runoff and provide for proper use, management, protection, improvement, and maintenance of those lands	5,000	5,000
Grand Valley project: Badgerwash Cooperative erosion and sedimentation study	2,000	2,000
Uncompahgre project: Investigation of erosion problems and preparation of plans for conservation work	3,000	3,000
Moon Lake project: Channel-erosion control in Cottonwood Wash and Duchesne River continued in cooperation with water users' association	32,000	21,000
Sanpete project: Control of damaging erosion and runoff	7,000	7,000
Provo River project: Measurement of seepage losses from test and demonstration canal lining	5,000	5,000
Subtotal, region 4	70,000	59,000

[1] Includes planning, administration and inspection of work, preparation of reports, travel and investigation of erosion problems.

[2] Includes planning, administration and inspection of work, preparation of reports, travel and investigations of erosion problems on operating projects including surveys.

Soil and moisture conservation operations for fiscal year 1956, by projects as presented to the Bureau of the Budget and as revised and presented to the Congress—Con.

	Request to Budget Bureau	Request to Congress
REGION 5		
Regional administration and supervision and regionwide soil and moisture conservation planning	$11,000	$10,000
Carlsbad project:		
Seeding and structural installations to control erosion; and weed-control demonstration	25,000	
Seeding and weed-control demonstration		8,000
Tucumcari project:		
Seeding and structural installations to control erosion; and weed-control demonstration	12,000	
Weed-control demonstrations		2,000
W. C. Austin project:		
Seeding and structural installations to control erosion; and weed-control demonstration	15,000	
Weed-control demonstration		2,000
Vermejo project:		
Seeding and structural installations to control erosion; weed-control demonstration; and investigations and surveys	27,000	
Seeding and weed-control demonstrations		2,000
Fort Sumner project: Weed-control demonstration	3,000	3,000
Middle Rio Grande project: Seeding and structural installations for erosion control; and weed-control demonstration	25,000	6,400
Rio Grande project:		
Salt-cedar control	7,000	
Salt-cedar control and erosion control, structural installation		35,900
Subtotal, region 5	125,000	69,300
REGION 6		
Regionwide plans, investigation, and surveys	[3] 20,000	[3] 16,000
Regional electro reclamation program	12,500	12,000
Missouri River Basin project:		
Angostura unit: Erosion control	8,500	8,500
Heart Division: Erosion control, revegetation, and siltation studies	7,000	5,500
Crow Creek unit: Erosion control	2,000	1,000
Belle Fourche project: Noxious-weed control	1,000	1,000
Huntley project: Improvement of saline soils and studies on demonstration sections of lining	11,500	10,500
Milk River project: Channel control and revegetation	5,000	4,500
Riverton project: 5-mile and Muddy Creeks, maintenance and replacements of installed control measure, revegetative plantings, noxious-weed control, installation of erosion-control measures and land-use management	108,500	77,000
Shoshone project: Erosion and noxious weed control and land rehabilitation	25,000	22,000
Sun River project: Revegetation, water loss and canal lining studies	15,000	10,000
Subtotal region 6	216,000	168,000
REGION 7		
North Platte project: Protective works and erosion control and ground water and seepage investigations	66,000	24,000
Kendrick project:		
Erosion control	4,000	
Surveys		500
Mirage Flats project:		
Canal and lateral protective works (prevention of runoff and sediment discharge to project structures and land)	30,000	
Cooperative watershed conservation survey		8,500
Colorado-Big Thompson project: Land-treatment surveys	2,000	1,500
Missouri River Basin project: Watershed surveys and land treatment of reservoir areas	84,000	38,500
Subtotal region 7	186,000	73,000
General supervision of program by Washington and Denver offices	19,000	12,000
Total	814,000	499,262

[3] Includes regionwide planning, administration and inspection of work, preparation of reports, travel, and surveys investigations.

Chairman HAYDEN. As I recall other bureaus and agencies of the Department of the Interior are increasing their activities for soil and moisture conservation. You actually sought more money for this purpose, but it was not given to you?

Mr. DOMINY. That is right.

Chairman HAYDEN. Was that specifically disallowed by the Bureau of the Budget?

Mr. DOMINY. No, sir; they merely gave us a ceiling for operation and maintenance. Everything that we had requested appropriations for under that heading which includes soil and moisture conservation, and the others I mentioned was affected in addition to the regular power, irrigation, operation, and maintenance.

REDUCTION IN HALOGETON CONTROL

Chairman HAYDEN. How much are you going to cut down the halogeton control?

Mr. DOMINY. I think we requested $150,000 and with this ceiling we reduced that to $50,000. We eliminated $100,000.

Chairman HAYDEN. I asked the last question because the Senate in the regular Interior appropriation bill substantially increased the amount of money to fight that weed.

Mr. DOMINY. That is why we are in with the request because we actually control land in the area which is infested with halogeton. If there is going to be a general control program, we feel that Reclamation should be in a position to participate in order to get complete control in a given area.

WHEELING CONTRACT COSTS

Chairman HAYDEN. Of the total increase of $2,500,000, how much is for increases under your wheeling contracts?

Mr. DOMINY. Mr. Campbell is the head of the power division, who has recently come to Washington, Mr. Chairman.

Mr. CAMPBELL. I don't have the figure totaled. I will have to supply that for the record. We have it broken down by the various projects.

Chairman HAYDEN. I think you had better give us a total figure of how many of these wheeling contracts have been made and something about the rate.

Mr. CAMPBELL. Yes, sir.

Chairman HAYDEN. You are satisfied that in each instance the cost of transmitting power to those entitled to it under these wheeling contracts is equal to or less than what the Bureau of Reclamation could do it for if it ran the service itself?

Mr. CAMPBELL. Yes, sir; that is the criteria under which the costs are determined.

EFFECT OF BUDGET CEILING

Mr. NIELSEN. Do you ask for the effect of the budget ceiling on that wheeling activity?

Chairman HAYDEN. Yes, if it did affect it. That is work that certainly ought to proceed because if you cannot wheel the power, you cannot get any money out of it.

Mr. CAMPBELL. Yes, sir.

(The information referred to follows:)

The following table shows the amount of funds requested for wheeling of the Bureau of the Budget for fiscal year 1956 and the amount allowed by the Bureau of the Budget in accordance with its instructions of reducing the Bureau of Reclamation request for wheeling to the level of that programed for fiscal year 1955. This reduction amounts to $373,568.

The only increase contained in fiscal year 1956 for wheeling over that programed for fiscal year 1955 is for new loads that are to be added to the system. It does not provide for any appreciable amount of load growth.

	In request submitted to Budget Bureau, fiscal year 1956	Amount now programed for fiscal year 1956
Central Valley project: Pacific Gas & Electric Co	$1,670,000	$1,613,000
Boise project: Idaho Power Co	117,000	117,000
Missouri River Basin project, region 6:		
East River Electric Power Cooperative	227,400	123,234
Rosebud Electric Cooperative	1,700	1,700
West Central Cooperative	6,100	6,100
I. & O. Cooperative	21,500	0
Black Hills Power & Light Co	31,700	20,700
Ottertail Power Co. (Missouri Oahe District)	9,900	6,000
Northwestern Public Service Co	6,900	5,900
Northern States Power Co	13,100	4,900
Montana Dakota Utility Co	116,000	99,000
Ottertail Power Co. (Missouri-Souris District)	55,800	32,000
Minnesota Power Electric Co	45,200	8,000
Agents wheeling to Central Power Cooperative	78,000	56,000
Big Horn District, wheeling	10,000	10,000
Montana Power Co	2,500	2,000
Missouri River Basin project, region 7:		
Nebraska Public Power System	175,000	86,438
I. & O. Cooperative	34,500	44,500
Others (not named)	108,000	142,500
Public Service of Colorado	166,800	144,560
Consumers Public Power District	13,000	13,000
Total	2,910,100	2,536,532

The Bureau of Reclamation wheeling contracts generally are negotiated contracts and the cost of wheeling to the Bureau is the same amount or less than it would cost the Bureau to construct, maintain, and own its transmission facilities.

The Bureau of Reclamation has 24 executed contracts for wheeling of Bureau power over transmission lines of others at an average cost to the Bureau of 1 mill per kilowatt-hour. However, there are 4 contracts which provide for wheeling charges in excess of 1 mill per kilowatt-hour and in these cases, although appropriated funds are required for the full transmission costs, the charges in excess of 1 mill are recovered from the customers.

Chairman HAYDEN. Are there any more questions on operation and maintenance?

Senator KNOWLAND. I know you are going to supply it for the record, but are there any wheeling contracts being held up because of the ceiling?

Mr. CAMPBELL. Not to my knowledge, at the present time, sir. That is something that we have to anticipate.

It is always based on an estimate. Sometimes we run short at the end of the fiscal year and we may have to transfer from available funds.

Chairman HAYDEN. You pay for wheeling the amount of power that is actually wheeled?

Mr. CAMPBELL. Yes, sir.

Chairman HAYDEN. You do not know exactly what that is going to be and so you make an estimate in advance?

Mr. CAMPBELL. That is right.

Chairman HAYDEN. If you find it is more than you have money to pay for, then the company has to wait for its money?

Mr. CAMPBELL. Yes, sir.

Mr. NIELSEN. We have to cover ourselves in our contracts for that possibility.

GENERAL ADMINISTRATION EXPENSES

JUSTIFICATION

Chairman HAYDEN. Let us go to the general administrative expenses.

Mr. NIELSEN. Mr. Crosthwait will testify on that.

Chairman HAYDEN. I will insert into the record at this point the justification.

(The justification referred to follows:)

General administrative expenses

Appropriation act, 1955	$4,000,000
Transfer to "Salaries and expenses, Office of the Solicitor, Interior"	384,121
Adjusted appropriation	3,615,879
Budget estimate, 1956	3,700,000

Analysis by activities

Activity	Adjusted appropriation, 1955	Estimate, 1956
1. Departmental and Denver Offices	$2,035,879	$2,038,000
2. Regional Offices	1,580,000	1,662,000
Total	3,615,879	3,700,000

GENERAL STATEMENT

The Bureau is requesting an appropriation of $3,700,000 to finance its general administrative expenses during fiscal year 1956. This is an increase of $84,121 over the amount made available for the current year after transfer of $384,121 to the Office of the Solicitor and $800,000 less than was appropriated for fiscal year 1954.

There are three major functions or activities which determine the basic workload under this appropriation. The first of these is responsibility for general supervision of the physical plant. From 1945 to the end of fiscal year 1955 reclamation physical plant was enlarged by the addition of facilities for the storage and delivery of irrigation water and for the generation and transmission of electric energy valued at more than $1 billion, bringing the total value of reclamation plant facilities to over $2 billion. Although the intent, frequently expressed in past appropriation acts, is that expenses incident to the responsibility for general administration of Bureau constructed projects, should be financed from nonreimbursable funds, the magnitude of such tasks is greater than can be financed by the general administrative expense appropriation as presently conceived.

General administration of Bureau-constructed projects include (1) activities dealing with the Government assets in lands and project facilities and in the development of repayment contracts; (2) activities in furtherance of general reclamation objectives such as successful project development and the extension of family-size unit farming; (2) encouragement of operation and maintenance of local project facilities by the water users; (4) for those projects which have been turned over to the water users for operation and maintenance reserved works must be inspected

and periodic checks made to see that the property for which the Government retains title is properly preserved and maintained; and (5) a wide variety of other activities which cannot properly be charged to specific projects.

The second item that contributes to the workload under this appropriation heading is related to river regulation. The Bureau must maintain frequent contact with all other agencies, public and private, engaged in the use of water in order that the Bureau reservoirs will be operated, not only to achieve their designed conservation objectives, but in accordance with applicable State laws, interstate compacts, interagency agreements, and the general economical needs of the area. This involves a large amount of work of a general administrative nature such as correspondence and conferences with representatives of the Corps of Engineers, the several States and subdivisions thereof, interstate compact commissions, and similar organizations.

The third function which must be financed from the appropriation is that of the overall direction of the reclamation program. This includes the work of developing broad policies and guidelines to insure that the wishes of the Congress as expressed in the appropriation act and other legislation are complied with; the preparation of information in justification of requests for funds for carrying out of approved reclamation programs; the answering of inquiries from the general public and Members of Congress with reference to specific activities being planned or carried on by the Bureau; and the continuous review to insure that the work of the Bureau is carried out expeditiously and efficiently.

The expense of maintaining the headquarters staff of the Bureau located in Washington is wholly financed from this appropriation. That part of the functions of the segment of the Commissioner's Office located in Denver which is of a general administrative nature and which is not properly chargeable to specific projects is also financed from this fund. In addition, allotments from the appropriation are made to the several regional offices consistent with their workload attributable to general administrative expense functions.

The following tabulation shows allotments for fiscal years 1955 and 1956 for the offices financed by this appropriation:

	Fiscal year 1955	Fiscal year 1956
Washington Office	$1,510,879	$1,500,000
Commissioner's Office, Denver, Colo.	525,000	538,000
Regional offices	1,580,000	1,662,000
Subtotal	3,615,879	3,700,000
Transfer to Office of the Solicitor	384,121	
Total appropriation or estimate	4,000,000	3,700,000

Departmental (Washington office), general administrative expenses

The request of $3,700,000 includes $1,500,000 allocation to the Washington office. This is $10,879 less than was allocated in fiscal year 1955. This reduction is attributable to the institution of certain economies through reducing to a minimum the requirements of the Commissioner's Office. The allocation to the Washington office represents an effort to maintain an efficient degree of overall direction and administration of the Bureau's operations at lower cost.

Commissioner's offices in Denver, general administrative expenses

The proposed allocation for fiscal year 1956 of $538,000 to the Commissioner's offices in Denver, Colo., is $13,000 more than was allocated for fiscal year 1955. While the greater part of the work performed in the Denver office is of a project type work, that is work for a specific project or activity for which appropriations are provided, certain activities and functions in the offices of the Commissioner located in Denver are those of the Commissioner's immediate staff and because they are nonproject in character come within the scope of general administration.

Denver office—Services to projects

The major portion of the expense required to maintain the Commissioner's Office in Denver, Colo., is incurred in rendering technical assistance and services to field offices, projects and activities. In fiscal year 1956 as heretofore, these services will be financed by transfer of funds from project and activity allotments on a program basis. A majority of such funds will be transferred from the construction and rehabilitation appropriation, although some funds will be trans-

ferred from the "Operation and maintenance" and "General investigations" appropriations. In all cases the transfer of funds will be based on the project or activity program that governs the amount of planning, designing, etc., which the Denver office will be requested to perform for each such project or activity. Since the work to be performed in Denver is an essential activity of the Bureau's entire program, the program planned for fiscal year 1956 is directly reflected in the activities of the Denver office. Bureau construction often is of a scale which makes necessary the extension of designing over a period of years. The activities of the Denver offices, therefore, cannot be tied completely and finally to the work program for any given fiscal year. Year to year increases or decreases in the Bureau's programs are reflected only in partial ratio in any given year.

Work to be performed during fiscal year 1956 other than that charged to general administrative expenses is estimated at $7,400,800.

Regional offices—General administrative expenses

It is proposed to allocate to the regional offices in fiscal year 1956 $1,662,000 which is $82,000 more than was allocated in fiscal year 1955. The increased allocation is due to the fact that most of the $85,315 overestimate transferred to the Solicitor's Office in fiscal year 1955 was transferred from allocations to the regional offices thus reducing their allocations in the current year. In fiscal year 1956 the allocations simply restore the level of funds approved for the regional offices.

Regional offices—Centralized project activities

Certain types of work required for the direct benefit of a project or other activity can be performed more economically and efficiently on a centralized basis. Where circumstances permit and to avoid duplication of project office staffs the Bureau mintains centralized organizations for the performance of such work. By this means the Bureau can upon request supply the skilled services required in the various technical fields at reasonable costs to the several projects or activities controlled by the central office. Thus, while no one project in a region or area may have need throughout the year for certain specialized engineering, or economic services, all projects and activities in the region and area will require such services during the year in sufficient amount to require the region or area to maintain a minimum staff of skilled specialists. Also by merging project requirements, it is possible to program a full year's work, and to accomplish it at a minimum cost. Since the centralized project activity work is performed for the direct benefit of projects, such work is financed through advances from those projects for which work is programed, and the obligations for which are included on the schedules of such projects and appropriations.

Work of this nature to be performed in the seven regions during fiscal year 1956 is estimated at approximately $4,800,000.

Itemization of estimate, general administrative expenses

	Estimate 1955	Estimate 1956
AMOUNTS AVAILABLE FOR OBLIGATION		
Appropriation or estimate: Reclamation fund, special fund	$4,000,000	$3,700,000
Transferred to "Salaries and expenses, Office of the Solicitor, Interior," pursuant to Public Law 465	−384,121	
Adjusted appropriation or estimate	3,615,879	
Reimbursements from other accounts	21,500	21,000
Total obligations	3,637,379	3,721,000
OBLIGATIONS BY OBJECTS		
Direct obligations		
01 Personal services	3,134,434	3,183,844
02 Travel	188,098	187,698
03 Transportation of things	13,098	13,866
04 Communication services	63,203	70,603
05 Rents and utility services	11,980	12,480
06 Printing and reproduction	24,160	22,084
07 Other contractual services	104,153	122,519
Services performed by other agencies	35,200	30,200
08 Supplies and materials	28,312	34,556
09 Equipment	11,544	19,925
13 Refunds, awards, and indemnities	51	51
15 Taxes and assessments	1,646	2,174
Total direct obligations	3,615,879	3,700,000
Obligations Payable Out of Reimbursements From Other Accounts		
01 Personal services	7,500	7,500
02 Travel	900	900
07 Other contractual services	12,000	12,000
08 Supplies and materials	1,100	600
Total obligations payable out of reimbursements from other accounts	21,500	21,000
Total obligations	3,637,379	3,721,000

GENERAL ADMINISTRATIVE EXPENSES

Statement of appropriation by fiscal year

1946	$3,956,200	1952	$5,478,203
1947	4,360,000	3d supplemental, pay	300,000
1948	3,130,000	1953	5,250,000
1949	3,868,582	1954	4,500,000
1950	4,365,100	1955	[1] 4,000,000
1951	6,864,000		

[1] Includes $384,121 transferred to Office of the Solicitor.

BUDGET ESTIMATE

Chairman HAYDEN. The adjusted appropriation for the current fiscal year was $3,615,879. The budget estimate is $3,700,000, and an increase of $84,000.

Mr. CROSTHWAIT. Senator, that difference in the fund between 1955 and 1956 is due primarily to the transfer of funds to the Solicitor's Office last year.

In tabulating the amount that was to be transferred, we made an error in the appropriation chargeable in submitting information to this committee of about $85,000 for certain of the lawyers that were employed at Denver.

The amount that we are asking corrects that error and puts us about on the basis we should have been last year.

The fund, as you know, is nonreimbursable. It is used primarily to handle those general administrative expenses that cannot be properly charged to individual projects.

The fund is used for the operation of our Washington office, the operation of those functions of our Denver office that are not directly related to projects, and operations in each of our regional offices that are of an overall general administrative nature.

Chairman HAYDEN. There is no way that those costs could be split down and charged to particular projects. I think experience shows that there is a necessity for a general administrative fund of this kind.

Mr. CROSTHWAIT. That is correct, sir. As we turn projects over to water users for operation there remains a residue of our maintaining, for instance, the records of their payments and certain overall administrative work in connection with projects that are turned over that you cannot properly charge back to water users.

We must maintain a staff to handle such functions both in Washington and the regional offices.

Then there are a number of general administrative problems. For example, our relationships with the States on problems other than investigations that we are working on that you can't properly charge back to the water users.

It is with this general administrative fund that we finance such operations.

EMERGENCY FUND

JUSTIFICATION

Chairman HAYDEN. I want to ask you about the budget estimate for the emergency fund of $700,000. I will include that justification in the record at this point.

(The justification referred to follows:)

EMERGENCY FUND, RECLAMATION PROJECTS

Estimate of appropriation, fiscal year 1956 ..... $700,000

JUSTIFICATION OF ESTIMATE

Authorization

The emergency fund was authorized by Public Law 790, dated June 26, 1948 for the purpose of providing funds for emergency repairs on operating projects in cases of physical damage resulting from storms, floods, earthquakes, etc., or other causes beyond its or the facilities users control, which cause or threaten to cause failure in the delivery of essential water or power.

Justification

To insure the Bureau a continued source of funds with which to make emergency repairs on project facilities and for other contingencies in fiscal year 1956, $700,000 is requested.

The emergency fund was established late in fiscal year 1949, with an initial appropriation of $1 million. Except for fiscal years 1950 and 1951 additional appropriations have been made each year since that time, with a total of $2,400,000 having been appropriated to date.

Since the establishment of this fund 36 allotments have been made for 31 emergencies on 21 bureau projects. Floods resulting from unseasonable melting snows and excessive rains, droughts, earthquakes, excessive ice packs due to hard and prolonged winters, and unsuspected deterioration of facilities resulting in serious injury or breakdown are a few of the conditions which have given rise to these emergencies. For example, an emergency allotment was made on July 8, 1953 to the Tucumcari project in New Mexico. Due to a continuation of the drought in the Southwest there had been practically no inflow into the storage reservoir

supplying this project during the previous year. In order to prevent a complete loss of crops on the project lands, an allotment was made for the purpose of installing pumps to deliver water from the storage pool below the elevation of the outlet canal at Conchas Dam. More recently 5 separate allotments culminating with 1 dated September 21, 1954 and totaling $164,800 were made to the Newlands project in Nevada for emergency repairs to facilities damaged by earthquakes which occurred on July 6 and August 23, 1954.

An analysis of the emergency fund is as follows:

Appropriated through fiscal year 1955		$2,400,000
Less:		
Net allotments through fiscal year 1954	$1,557,250	
Allotments, fiscal year 1955 (as of Jan. 1, 1955):		
Orland project	45,000	
Newlands project	164,800	
Missouri River Basin project: Dickinson unit	83,300	
		1,850,350
Available for remainder of fiscal year 1955		549,650

While the emergency fund has some half million dollars available at the present time, in the normal course of events this figure will be reduced considerably by the beginning of the next fiscal year. A balance of at least $1 million in this fund at the beginning of fiscal year 1956 is necessary in view of probable emergency requirements on the Bureau's increasing physical plant. The emergency fund has proved to be a sound safety factor, in view of the time element involved in the normal process of procuring appropriations.

Itemization of estimate, emergency fund, irrigation and power systems, Bureau of Reclamation

	Estimate, 1955	Estimate, 1956
AMOUNTS AVAILABLE FOR OBLIGATION		
Appropriation or estimate: Reclamation fund, special fund	$200,000	$700,000
Unobligated balance brought forward	636,020	300,000
Recovery of prior year obligations	63,672	
Total available for obligation	899,692	1,000,000
Unobligated balance carried forward	−300,000	
Obligations incurred	599,692	1,000,000
OBLIGATIONS BY OBJECTS		
01 Personal services	31,186	
02 Travel	2,275	
03 Transportation of things	10	
04 Communication services	255	
05 Rents and utility services	200	
06 Printing and reproduction	25	
07 Other contractual services	181,673	
08 Supplies and materials	1,850	
09 Equipment	100	
10 Lands and structures	133,222	
15 Taxes and assessments	106	
Funds available for emergencies	248,790	1,000,000
Obligations incurred	599,692	1,000,000

Statement of appropriations by fiscal years

1952	$400,000	1954	$400,000
1953	400,000	1955	200,000

WORK ANTICIPATED

Chairman HAYDEN. The history you can supply, but what do you anticipate in the way of work this year?

Mr. GOLZÉ. Mr. Chairman, we had $775,390 in the emergency fund on July 1, 1954. The present balance is $653,484. So we have had a net expenditure of a little over $100,000 so far this year.

We have no way to tell just what is going to happen in the 5 or 6 weeks that is left in this fiscal year.

Chairman HAYDEN. On June 30 that money lapses?

Mr. GOLZÉ. No, sir; this money carries over.

CARRYOVER FUNDS

Chairman HAYDEN. How much do you have in your carryover?

Mr. GOLZÉ. If we have no further allotments this year, we will have $653,000 carried over, which with the $700,000 request will give us $1,350,000 for the next fiscal year.

Senator KNOWLAND. I think along the line the chairman suggested sometime ago, if we could get the figures on what the emergency fund expenditures have been in the last 10 years, it would be helpful.

We want you to have what is reasonable in an emergency fund, but there is no sense of building that up out of proportion to what is needed.

If it is enough of an emergency Congress can take care of it.

Mr. GOLZÉ. Mr. Chairman, I have that statement here, and I can put it in the record now.

Senator KNOWLAND. Do you have the figures?

Mr. GOLZÉ. Yes, sir.

Senator KNOWLAND. Could you read the figures, over for the last several years.

EMERGENCY FUND EXPENDITURES

Mr. GOLZÉ. The emergency fund goes back only to June 26, 1948 when it was authorized by Congress and our first appropriation as I recall was $1 million in a deficiency bill in fiscal 1949.

We have had a total appropriation for the fund of $2,400,000. We have allocated out of that $1,746,515 over the 6 years since the fund first became available.

Senator KNOWLAND. Have you the figures by years?

Mr. GOLZÉ. I have them grouped only by projects and the dates of allotments. I can rearrange it by years.

Senator KNOWLAND. Will you rearrange it so we can see what has actually been needed each year?

Mr. GOLZÉ. Yes, sir.

Chairman HAYDEN. That will be inserted into the record at this point.

(The information referred to follows:)

Net allotments by fiscal years, emergency funds

Fiscal year (net total allotments):	
1949	$61,500.00
1950	208,544.67
1951	382,411.08
1952	741,621.75
1953	27,939.60
1954	202,592.65
1955	121,905.92
Total	1,746,515.67
Total appropriations	2,400,000.00
Less allotments	1,746,515.67
Unallotted, May 31, 1955	653,484.33

Status of emergency fund allotments as of May 31, 1955

Unallotted balance as of July 1, 1954		$775,390
Allotments during fiscal year 1955:		
Hungry Horse	$16,000	
Missouri River Basin-Dickinson unit	83,300	
Newlands	164,800	
Orland	45,000	
Strawberry Valley	1,293	
Shoshone	80,000	
		390,393
Subtotal		384,997
Reimbursement and returns:		
Milk River	50,000	
Minidoka	3,687	
Newlands	164,800	
Sun River	50,000	
		268,487
Total, unallotted as of Apr. 28, 1955		653,484

Sun River and Milk River projects: Reimbursed from emergency flood and storm repair appropriation to Secretary included in the Interior Department Appropriation Act, 1955, Public Law 465, dated July 1, 1954.

Minidoka project: Return of unused allotment to the project.

Newlands project: Reimbursed from President's emergency fund administered by the Federal Defense Administration.

Emergency fund net allotments

	Net allotments		*Net allotments*
Arnold	$1,386.57	Rio Grande	$166,429.50
Belle Fourche	25,192.67	Riverton	143,390.63
Boise	498,723.02	Shoshone	88,000.00
Buford-Trenton	[1]	Strawberry Valley	1,293.18
Grand Valley	23,677.62	Sun River	[1]
Hungry Horse	16,000.00	Tucumcari	76,426.41
Kendrick	253,000.00	Yakima	5,000.00
Milk River	74,616.58		
Minidoka	26,312.74	Total allocations	1,746,515.67
Mirage Flats	8,941.75	Commissioner's reserve as of May 31, 1955	653,484.33
Missouri River Basin, R-6, Dickinson unit	288,300.00		
Newlands	[1]	Total appropriations	2,400,000.00
Orland	45,000.00		
Owyhee	4,825.00		

[1] Allotments made were reimbursed from other funds. See explanation included in the following statement:

EMERGENCY FUND ALLOTMENTS AND PURPOSES FOR WHICH MADE AS OF MAY 31, 1954

A summary statement by project of the emergencies which have required allotments from the emergency fund follow.

Arnold project, Oregon, $1,387.—For protection of Fort Shaw headworks and to start emergency replacements and repairs to canals, drains and structures damaged by a flood in the project area which occurred in the late spring of 1953.

Belle Fourche, S. Dak., $25,193.—For replacement of damaged head gates cost of which has been included in amendatory repayment contract.

Boise project, Idaho, $498,723.—For repair of Black Canyon Dam and spillway weakened by successive erosion and undercutting of spillway. Negotiations are currently underway with the water users looking toward a repayment contract to return that part of the cost charged to irrigation. The remainder of the cost of this emergency work will be repaid from power revenues.

Buford-Trenton project, North Dakota, $31,300.—For restoration of damaged facilities occasioned by flood in spring of 1952. The "Emergency flood and storms" appropriation of the Secretary's Office was used to reimburse this fund.

Grand Valley project, Colorado, $23,678.—For making temporary repairs caused by a landslide at tunnel No. 3 on the High Line Canal. The cost of the temporary repairs will be repaid by the water users association under terms of an amendatory contract.

Hungry Horse project, Montana, $16,000.—For emergency oil cooler replacement.

Kendrick project, Wyoming, $253,000.—For emergency repairs to the tailrace and canal below Seminoe Dam and access road caused by excessive spring floodwater, the cost of which will be added to the existing payout schedule payable from power revenues.

Milk River project, Montana, $124,617.—For emergency repair of Spider Coulee and Vandalia flumes the cost of which has been included in an amendatory repayment contract with the water users; replacement of

Mr. GOLZÉ. It is a fluctuating amount, Mr. Chairman, depending entirely on uncontrolled circumstances.

ADMINISTRATIVE PROVISIONS

AUTHORITY TO PURCHASE PASSENGER VEHICLES

Chairman HAYDEN. The Bureau is requesting authority to replace 245 passenger carrying vehicles.

I will include this statement in the record at this point.

(The statement referred to follows:)

AUTHORIZATION FOR THE PURCHASE OF 245 PASSENGER MOTOR VEHICLES FOR REPLACEMENT ONLY

It is proposed to replace in fiscal year 1956, 245 passenger motor vehicles of the total fleet of 1,006 vehicles. The total fleet of 1,006 includes 981 passenger cars and station wagons, 5 ambulances, 3 buses, and 2 coupe-pickups of the Bureau of Reclamation, and 15 vehicles allocated to the participating agencies in the Missouri River Basin project. It does not include 100 vehicles to be disposed of without replacement during fiscal year 1956. The Bureau has drastically reduced, over the past several years, the number of its passenger-carrying vehicles. Although the Bureau has in the process of this reduction eliminated those which were most expensive to operate, it will have at the end of this fiscal year 609 vehicles which meet the replacement standards established by the General Services Administration.

Four hundred and twenty-two vehicles are over 8 years old and have been driven more than 60,000 miles; 100 of these vehicles will be disposed of without replacement in 1956. This will leave a balance of 322 vehicles requiring early replacement. The proposed authorization will permit replacement of 245 of these vehicles which have been found uneconomical to operate.

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the deteriorated Hay Coulee flume of the Glasgow division; restoration of damaged facilities occasioned by floods in the spring of 1952 and 1953. $50,000 from the "Emergency flood and storms" appropriation of the Secretary's Office was used to reimburse this fund.

Minidoka project, Idaho, $26,313.—For purchase of urgently needed transformers for replacements. These transformers cannot be acquired under the regular program for fiscal year 1954 due to the reduction in the fiscal year 1954 allotment.

Mirage Flats, Nebr., $8,942.—For repairs to the main canal to restore water service to the farmers. Repayment of this amount is provided for under an existing repayment contract with the water users.

MRB, Dickinson unit, $288,300.—For preventing further immediate damage to spillway and preparing plan and estimate for repair for reconstruction and actual repair work on the spillway structure.

Newlands project, Nevada, $164,800.—For expenses in connection with emergency inspection and repairs to project works damaged by earthquakes of July 6 and August 23, 1954. This was reimbursed by the Federal Civil Defense Administration from the President's emergency fund.

Orland project, California, $45,000.—For construction of a permanent replacement of the diversion dam at the North Canal headworks on Stony Creek which failed and has been replaced temporarily with an earth-fill dam. Repayment of this amount is provided for under an existing repayment contract with the water users.

Owyhee project, Oregon-Idaho, $4,825.—For repairing break in the South Main Canal and for rehabilitation of the damaged area. The cost of this work was repaid with the regular operation and maintenance assessment for the year.

Rio Grande project, New Mexico-Texas, $166,430.—For emergency repair of gates and spillway at Elephant Butte Dam made necessary by a severe winter and ensuing flood, and for emergency purchase of power for resale in order to keep commitments to power customers following unforeseen water shortages. The cost of these items will be repaid from power revenues.

Riverton project, Wyoming, $143,591.—For replacing washed-out drop and turnout and two large chutes on the Pilot Canal caused by undermining and winter deterioration. Amendatory contracts with water users have been executed which provide for the repayment of costs incurred for this work.

Shoshone project, Wyoming, $88,000.—For replacement of a section of the Heart Mountain Canal destroyed by a landslide, and $80,000 for repairs to Shoshone powerplant due to rockslide.

Strawberry Valley project, Utah, $1,293.—For Bureau's share of costs incurred in the suppression of range fire at Flat Canyon, Utah. Within this area are public lands of the United States under Reclamation withdrawal.

Sun River project, Montana, $50,000.—For emergency replacements and repairs to canals, drains, structures, and other facilities damaged as the result of floods on the project during 1953. $50,000 has been reimbursed from the "Emergency flood and storm repairs" appropriation of the Secretary's Office.

Tucumcari project, New Mexico, $76,426.—For the purchase and installation of pumps, motors, and other facilities essential to the delivery of water to project lands at the earliest possible date. Prolonged and unprecedented drought conditions in the area have dried up a large part of the surface water.

Yakima project, Washington, $5,000.—For emergency work on the powerplant occasioned by an extremely long and cold winter whereby anchor ice formed in the power canal.

TOTAL PASSENGER VEHICLES

Chairman HAYDEN. What is the condition of your fleet of automobiles?

Mr. CROSTHWAIT. Mr. Chairman, our automobile supply is getting pretty old. We have reduced our fleet materially in the last several years, so that it is down now, or will be at the end of this fiscal year, to 1,006 passenger-carrying vehicles, including 15 vehicles allocated to the participating agencies in the Missouri River Basin.

Chairman HAYDEN. What is the most you ever had?

Mr. CROSTHWAIT. We had as high as 1,800 passenger-carrying vehicles.

We have reduced it almost 50 percent in the last 3 years. Of the 1,006 in the fleet that we now have, there will be 9 that will be 9 years old; 242 will be 8 years old, 124 of them will be 7 years old, and 232, 6 years old.

Likewise, of that same group there will be 120 that will have between 80,000 and 100,000 miles on them, and 360 of them with between 60,000 and 80,000 miles.

REPLACEMENT OF OLDER VEHICLES

So we have asked for authority to replace 245—we do not want to acquire any additional ones—and we will eliminate an additional 100 vehicles.

We would like to replace, of those older vehicles, 245 of them. We think it is just good business that they should be replaced. They are reaching a stage where their maintenance costs are uneconomical.

So we think it would be good business to replace a minimum of about 245 of those 1,006 vehicles because of their age and their mileage.

Chairman HAYDEN. I assume that it is quite difficult to arrive at a fixed rule about how long you ought to keep an automobile.

Mr. CROSTHWAIT. The General Services Administration has a general rule that a car will be replaced if it has 60,000 miles or is 6 years old. All of our cars that we are requesting authority to replace in fiscal year 1956 exceed the replacement standards that have been established by the General Services Administration.

CONSTRUCTION AND REHABILITATION

BUDGET ESTIMATE

Chairman HAYDEN. If there are no other questions we will take up "Construction and rehabilitation." The budget estimate is $146,041,000. This amount includes the sum of $3,700,000 submitted in House Document 161.

For the current fiscal year $133,757,000 was appropriated.

The budget estimate is an increase of $12,284,000 over the amount appropriated for the current fiscal year.

LETTER FROM SECRETARY AANDAHL

I received a letter from Secretary Aandahl in which he submits several program changes within the budget estimates.

This letter will be included in the record at this point.

(The letter referred to follows:)

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., April 29, 1955.

Hon. CARL HAYDEN,
United States Senate, Washington, D. C.

MY DEAR SENATOR HAYDEN: There is submitted for your consideration proposed reprograming of funds included in the budget for fiscal year 1956 for the appropriation "Construction and rehabilitation, Bureau of Reclamation."

The program adjustments are confined to work to be performed in fiscal year 1956 in the Missouri River Basin project as follows:

Lower Marias unit, Montana	−$2,825,000
Glendo unit, Wyoming	2,120,000
Hanover-Bluff unit, Wyoming	290,000
Missouri River Basin project investigations	415,000
Total	2,825,000

The reduction of $2,825,000 on the Lower Marias unit represents a decision to defer construction of irrigation facilities and the development farm presently included in the budget estimate pending acceptance of a repayment contract by the irrigation district to be served. A petition authorizing the irrigation district board to execute the repayment contract has been in circulation since November 1954. There is no immediate prospect that a sufficient number of landowners will sign the petition authorizing the repayment contract. Accordingly, the construction of the irrigation facilities must be postponed.

Construction of the Glendo Dam and powerplant was started in 1955 with funds in the amount of $1 million provided in the Supplemental Appropriation Act, 1955. Our letter of April 29, 1955, requested your approval of a proposal to program an additional $800,000 in fiscal year 1955 from savings on other projects which would allow for payment of earnings scheduled by the prime contractor in the construction of the dam. The additional amount of $2,120,000 proposed herein for fiscal year 1956 would allow for construction of the dam, powerplant, and appurtenant works at a rate which will make project benefits available a year earlier than presently scheduled. This will reduce costs through reduction of additional years of overhead charges.

The increase of $290,000 for the Hanover-Bluff unit would allow for increased payments under a construction contract for pumping plants now in effect. It would allow the contractor to proceed at a more efficient rate and complete his operations in fiscal year 1956. It will also allow for an earlier award of contracts for the construction of canals and laterals in both the Hanover and Bluff areas.

The increase of $415,000 for Missouri River Basin project investigations is needed for concentrating and expanding the investigation program for new irrigation in North and South Dakota and parts of Montana.

These adjustments in the 1956 program in the Missouri River Basin project have been discussed with the Bureau of the Budget. We have been informally advised that there would be no objection to their submission to the Committees on Appropriations of the Congress.

Representatives of the Bureau of Reclamation will be prepared to justify these adjustments in detail at the time of hearings on the 1956 budget estimates.

Sincerely yours,

FRED G. AANDAHL,
Assistant Secretary of the Interior.

PROJECT BREAKDOWN

Chairman HAYDEN. We will take up the details when we discuss the various projects.

I will also include in the report committee table BR–3, which is a breakdown by projects of the total estimates.

(The statements referred to follows:)

Bureau of Reclamation, construction and rehabilitation

Project or unit	Total estimated Federal cost (obligations)	Program, 1955		Total allotted to Mar. 31, 1955	Estimated unobligated balances June 30, 1955 (budgeted)	Estimate, 1956	
		Total	Allocation of appropriation			Total	New funds
Eklutna project, Alaska	$29,550,000	$2,311,947	$2,307,147	$29,550,000			
Gila project, Arizona	54,822,977	4,405,343	4,273,200	48,676,149	$443,993	$3,943,993	$3,500,000
Yuma project, auxiliary division, Arizona	1,160,339	100,000	100,000	752,339		408,000	408,000
Palo Verde project, Arizona-California	6,909,000					1,985,000	1,985,000
Colorado River front work and levee system, Arizona-California-Nevada	9,730,582	104,000		7,758,286	145,000	145,000	
Parker-Davis project, Arizona-California-Nevada	116,042,137	1,572,138	1,453,580	113,860,309		1,390,000	1,390,000
Boulder Canyon project, Arizona-Nevada	164,767,000	260,000	984,000	159,787,771	916,000	1,116,000	200,000
Boulder City municipal office, Nevada	171,700	30,000	30,000	101,700		50,000	50,000
Cachuma project, California	43,575,000	6,445,026	7,170,000	43,555,000	725,000	725,000	
Central Valley project, California	751,988,520	20,873,491	20,960,338	450,122,202	329,000	14,329,000	14,000,000
Santa Maria project, California	16,689,751					1,000,000	1,000,000
Solano project, California	46,474,396	7,000,642	6,975,000	9,823,615		13,000,000	13,000,000
Colorado-Big Thompson project, Colorado	159,692,279	1,250,000	1,130,000	155,933,637		2,100,000	2,100,000
Michaud Flats project, Idaho	3,955,712					520,000	520,000
Minidoka project, North Side pumping division, Idaho	10,514,000	1,925,000	1,900,000	4,071,260		2,200,000	2,200,000
Palisades project, Idaho	74,038,000	12,938,000	12,936,000	45,250,906		9,000,000	9,000,000
Fort Peck project, Montana-North Dakota	21,378,794	488,000	475,000	10,382,794		325,000	325,000
Carlsbad project, New Mexico	1,471,000	300,000	300,000	300,000		1,171,000	1,171,000
Tucumcari project, New Mexico	16,760,934	11,871		16,463,934			
Middle Rio Grande project, New Mexico	28,808,874	2,139,000	2,129,000	6,684,816		[1] 7,200,000	[1] 7,200,000
Vermejo project, New Mexico	2,736,904	661,010	638,000	2,736,904			
Rio Grande project, New Mexico-Texas	16,353,830	173,272	147,500	16,313,630		40,000	40,000
Deschutes project, north unit, Oregon	12,880,252	80,681	49,400	10,598,377		274,000	274,000
Klamath project, Oregon-California	20,761,000	20,000		14,723,000			
Weber Basin project, Utah	63,187,000	7,900,000	7,870,000	13,731,270		10,895,000	10,895,000
Chief Joseph Dam project, Foster Creek division, Washington	4,615,802					631,000	631,000
Columbia Basin project, Washington	760,874,000	11,758,000	11,525,000	484,736,386		12,500,000	12,500,000
Yakima project, Kennewick division, Washington	12,969,017	4,096,139	4,000,000	8,973,048		3,000,000	3,000,000
Yakima project, Roza division, Washington	22,172,147	83,792	79,000	18,626,106		75,000	75,000
Eden project, Wyoming	7,368,125	804,731	700,000	5,101,313		800,000	800,000
Kendrick project, Wyoming	33,396,533	780,000	730,000	31,957,533		750,000	750,000
Riverton project, Wyoming	25,343,000	479,500	298,500	20,475,110		300,000	300,000
Riverton project, payment to Shoshone and Arapaho Indians	1,009,500	1,009,500	1,009,500	1,009,500			
Shoshone project, Wyoming	22,592,000	470,000	470,000	21,817,854		390,000	390,000
Drainage and minor construction	288,512,935	1,584,228	799,052	276,289,840	557,130	688,349	348,000
Rehabilitation and betterment	27,622,566	1,674,739	1,583,799	12,765,316		2,125,000	2,125,000
Missouri River Basin project:	48,065,443	3,850,000	3,625,000	21,226,860		6,784,000	6,784,000
Bostwick division, Nebraska-Kansas	390,000	95,428		390,000	133,700	85,232	
Buford-Trenton protection work, North Dakota	69,702,921	875,000	875,000	49,918,261		1,500,000	1,500,000
Frenchman-Cambridge division, Nebraska							

See footnotes at end of table, p. 52.

Bureau of Reclamation, construction and rehabilitation—Continued

Project or unit	Total estimated Federal cost (obligations)	Program, 1955		Total allotted to Mar. 31, 1955	Estimated unobligated balances June 30, 1955 (budgeted)	Estimate, 1956	
		Total	Allocation of appropriation			Total	New funds
Missouri River Basin project—Continued							
Glendo unit, Wyoming	$44,300,000	$1,800,000	$1,800,000	$1,800,000		$8,120,000	$8,120,000
Hanover-Bluff unit, Wyoming	3,383,000	450,000	450,000	659,198		1,540,000	1,540,000
Heart Butte unit, North Dakota	6,253,000	326,000	300,000	4,203,779		95,000	200,000
Helena Valley unit, Montana	11,962,287	250,000	250,000	523,287		3,000,000	3,000,000
Kirwin unit, Kansas	18,995,552	2,725,000	2,725,000	13,940,142		1,400,000	1,400,000
Lower Marias unit, Montana	65,837,305	6,350,000	5,946,000	17,187,305		3,675,000	3,675,000
Rapid Valley unit, South Dakota	8,774,901	2,397,933	2,149,700	7,372,901		490,000	490,000
Sargent unit, Nebraska	16,131,273	1,000,000	1,000,000	1,900,666		3,300,000	3,300,000
Transmission division	312,705,895	12,480,897	12,325,000	81,979,098		16,480,000	16,480,000
Webster unit, Kansas	17,842,404	4,321,000	4,321,000	8,685,500		3,500,000	3,500,000
Drainage and minor construction	134,454,816	801,258	330,000	122,143,398	$22,000	522,000	500,000
Investigations	1,913,123,690	2,537,694	2,049,150	46,135,424		2,915,000	2,915,000
Other departmental agencies:							
Bureau of Land Management	7,048,000	208,622	200,000	3,751,959		200,000	200,000
Bureau of Indian Affairs	6,850,000	194,264	150,000	2,394,743		150,000	150,000
Geological Survey	63,669,000	1,510,041	1,475,000	27,198,759		1,660,000	1,660,000
Bureau of Mines	5,000,000	113,684	100,000	1,400,559		100,000	100,000
National Park Service	8,080,000	187,203	180,000	2,270,000		230,000	230,000
Fish and Wildlife Service	7,303,000	170,883	135,000	3,254,696		210,000	210,000
Subtotal, other agencies	97,950,000	2,384,697	2,240,000	40,270,716		2,550,000	2,550,000
Subtotal, Missouri River Basin project	2,769,782,487	42,644,907	40,385,850	418,247,135	155,700	55,956,232	55,954,000
Total construction and rehabilitation program	5,650,588,093	136,374,957	[2] 133,408,866	2,461,197,040	3,271,823	148,942,574	146,041,000
Reconciliation to President's budget:							
Adjustments to unobligated balances		1,302,993				−1,197,993	
Unobligated balances, working funds		214,438					
Reimbursements from non-Federal sources		14,000				5,000	
Prior year balances, Denver office and CPA		518,730				11,700	
Total		138,425,118				144,061,281	

[1] Reflects addition of $3,700,000 in H. Doc. 161.

[2] Excludes $348,134 transferred to Solicitor.

Chairman HAYDEN. I think the best way to consider this appropriation is to take the projects in the order they appear on the table before us.

I wish to state that the committee expects to be advised of any problems or complications that exist on any of these projects.

The justifications for each project will be included in the record at the time the project is discussed.

Where do you want to start in, with Alaska?

GENERAL STATEMENT ON CONSTRUCTION

Mr. NIELSEN. Mr. Chairman, I have a general statement on construction I would like to supply for the record.

Chairman HAYDEN. Very well.

(The statement referred to follows:)

GENERAL STATEMENT, CONSTRUCTION

Progress on construction during the first half of fiscal year 1955 was generally satisfactory and with a few exceptions most goals were met. Favorable fall weather permitted embankment work for several earth dams to continue well into December.

Major work under construction during the first half of fiscal year 1955 included 1 concrete dam, 9 earth dams, 7 powerplants, and 4 tunnels. Extension of irrigation canal and lateral systems including open canals and laterals, pipelines, and pumping plants continued at a fairly uniform rate on the Columbia Basin, Central Valley, Gila, and Missouri River Basin project. Transmission line and substation construction was continued on Missouri River Basin and Parker-Davis projects. Work was initiated in several new areas of the Missouri River Basin project with start of construction on the Glendo Dam and powerplant on the North Platte River in Wyoming and the Lovewell Dam, the Milburn Dam, and Sargent Canal in Nebraska· 1 earth dam, 1 powerplant, 2 tunnels, and the final contract on the San Diego aqueduct were completed. On January 1, 1955, construction contracts in force had a face value of approximately $151 million.

During the second half of fiscal year 1955 it is anticipated that most of the work scheduled will be prosecuted as programed. Construction now underway will continue and with the new awards made during the winter, such as Glendo Dam, Lovewell Dam, Sargent unit, etc., will be underway as the spring construction season returns. Work will be started on the canals and laterals of the distribution system on the Heart Butte unit. Initial contracts are scheduled to be awarded for a pumping plant of 240 cubic feet per second capacity for extension of the Minidoka project, and 6 pumping plants with a total capacity of 173 cubic feet per second and associated lateral systems for the Hanover Bluff unit, Missouri River Basin project. Additional pumping plants and lateral systems are also to be started on the Columbia Basin, Yakima, Gila, and Missouri River Basin projects. Work will be completed or nearly so on the 2,400-foot long Camino tunnel and the Camino conduit of the Sly Park unit, Central Valley project, and the Kirwin Dam of the Missouri River Basin project. Also to be completed in time for initial irrigation in the spring of 1955 are an extension of the West Canal and two irrigation lateral systems on the Columbia Basin, two lateral distribution systems on the Cachuma project, two lateral system units on the Central Valley project, and a section of canal and lateral system on the Eden project.

The first generating units of the Folsom and Nimbus powerplants on the Central Valley project, California, and the second unit of the Eklutna powerplant on the Eklutna project, Alaska, will be placed in operation during 1955. Power transmission facilities to be completed by the close of the fiscal year include 2 new substations and additions to 2 others in the Parker-Davis project, and 2 major substations plus several small substations or additions in the Missouri River Basin project.

Construction activities in fiscal year 1955 will provide irrigation facilities for approximately 315,000 acres of land including both new and supplemental water and an increase of 131,100 kilowatts of installed generating capacity.

Rehabilitation and betterment work is continuing on many projects to restore usefulness of existing installations and improve their operation. Work of this

nature involves replacing obsolete pumping plants, repairing pipelines and other irrigation structures, rehabilitating canals and drains, placing lining in pervious reaches of canals, repairing spillways, dams and other control structures. Rehabilitation work programed for fiscal year 1956 amounts to $2,125,000. This will provide for the completion of rehabilitation work on 4 projects and for the orderly progress of work on an additional 5 projects where program requirements extend beyond the close of fiscal year 1956.

Starting fiscal year 1956 the Bureau of Reclamation will have about 213 major construction and supply contracts in force with a total face value of approximately $179 million. The program for fiscal year 1956 calls for awarding 253 major contracts with a face value of $98 million. It is anticipated that contractors' earnings during this period on contracts in force at the beginning of the year will amount to about $58,700,000, and contractors' earnings under new contracts to be let during the same period will amount to about $34 million, making a total of $92,700,000 in contract earnings for the fiscal year.

Construction in fiscal year 1956 will be continued on 23 projects and 13 units of the Missouri River Basin project plus necessary drainage and minor construction activities on 7 projects and 8 Missouri River Basin units on which major construction has been completed or temporarily deferred. Work is scheduled to be initiated on the Palo Verde diversion dam on the Colorado River, the Santa Maria project in California, the Michaud Flats project in Idaho, the Foster Creek division of Chief Joseph Dam project in Washington, and the Haystack Reservoir on the Deschutes project in Oregon. Work will be completed on such major projects as the $7,560,000 Pactola Dam in South Dakota, the 86-mile 230-kilovolt Jamestown-Fargo transmission line, the $12,922,000 Webster Dam in Kansas, the 162,000-kilowatt Folsom powerplant in California, and the $4,845,000 Chandler power and pumping plant on the Yakima project, Washington. Facilities to be completed in fiscal year 1956 will provide a full supply of irrigation water for about 127,000 acres and a supplemental supply for about an additional 85,000 acres. Additional generating capacity of 120,000 kilowatts will become available.

A number of difficult construction problems were overcome or substantially reduced in fiscal year 1955. Excavation of the Tecolote Tunnel on the Cachuma project was resumed in January 1954, following a 9-months' shutdown because of large flows of hot water under high pressure. In order to make it possible to proceed with the tunnel excavation and improve working conditions at the heading, the contractor increased the volume of air at the heading and installed refrigeration equipment to cool the air. The pumping facilities for handling the water were increased by threefold. After excavating 4,716 linear feet of tunnel in about 9 months, the tunnel was holed through on January 15, 1955. It is anticipated that lining of the tunnel will be completed by the end of September 1955.

On December 22, 1954, the construction of Eklutna Tunnel was completed and generation of power was begun on January 6, 1955. Completion of the second generating unit is expected in April 1955. Good progress was made by each of the two major contractors on this project during the year and no unusual construction problems were encountered.

Contractors on the distribution systems in the San Joaquin Valley of the Central Valley project, California continued to repair leaks in the concrete pipelines. One of these systems and the one on which the most difficulty has been experienced, is the Southern San Joaquin Municipal Utility District. This system, which was the first constructed by the Bureau on the Central Valley project, has had a higher incidence of leaks than any of the several systems subsequently built. Under the guaranty clauses which hold the contractor responsible for all leaks which occur during a period of 3 years following completion of construction, the contractor has been repairing leaks as they occur and it is expected that by the time the systems are turned over to the irrigation districts they will be reasonably free of leaks and that only normal annual maintenance will be required.

To determine whether the system as constructed was adequate a 2-man consulting board was appointed to review the design and construction. Following an investigation the board was unable to reach a common conclusion so the consulting engineer representing the Department was requested to submit his individual report. This report has been accepted by the Department. In summarizing the situation the report states:

"The question of quality hinges primarily on the leak situation. Otherwise the quality of the work appears to be excellent.

"The leak pattern, while discouraging during initial operations of the system, is showing a favorable trend. This is the experience of all neighboring districts

using concrete-pipe systems under closely comparable conditions. None of these districts are alarmed over the leak situation. Because of the high quality of the repairs, they will not adversely affect the quality of the system.

"There appears to be no doubt about the ability of the system to deliver the quantities of water called for in the design."

Construction costs on reclamation work decreased about 5 percent from costs for similar construction during 1953.

Employment in the nonbuilding segment of the construction industry, in which reclamation construction is classified, showed consistent gains over 1953 levels, and in midsummer and early fall was at record levels. Average weekly earnings of workers in contract construction during the first 9 months of 1954 were above the levels of the previous year. Hours of work during 1954 have been slightly but consistently higher than a year earlier.

The wholesale price index for building materials in 1954 showed a gradual upturn after July 1954, reaching an all time high at the end of the year. The rise was particularly marked in the prices reported for lumber, structural steel and cement products. Structural steel prices increased about 2½ percent during the year, due in large measure to a new wage settlement in the steel industry. Cement prices increased by about the same amount, while lumber prices, which had been declining slowly since mid 1953, increased about 3 percent during 1954.

Bidding interest increased from an average of 7.3 bids per schedule in 1953 to 8.0 in 1954. Keener competition among contractors in 1954 was evident in that the annual average of low bids received on construction schedules during 1953 was about 91 percent of the engineers' estimate, whereas in 1954 this average dropped to 85 percent.

Undoubtedly this keener competition, together with relatively stable costs for labor and material, was a major factor contributing to the 5 percent decrease in reclamation construction costs during 1954. We expect that this high-bidding interest and competition will prevail in 1955. However, the outlook is for slowly but steadily increasing construction costs, since it appears that contractors will no longer be able or willing to further decrease their profit and contingency margin in order to absorb anticipated increases in wage rates and materials.

Last year the House report on the Interior Department appropriations bill called attention to the overdesigning of structures and using nonstandard and specially designed equipment where standard designs and off-the-shelf items might be used to better advantage. We have taken action to standardize designs and use stock items where possible, and our efforts along this line are continuing.

Beginning in calendar year 1952, foreign manufacturers started to bid on equipment and materials required by this Bureau. From then until the end of calendar year 1954, the Bureau has awarded 46 contracts to foreign manufacturers having a total contract value of $5,816,616. During the first half of fiscal year 1955, nine such contracts were awarded having an aggregate face value of $450,635. The dollar value of all 46 contracts is about 20 percent of the dollar value of the total purchase contracts awarded during the same period. The contracts with foreign manufacturers cover the furnishing of high-voltage electrical equipment such as generators, circuit breakers, transformers, lightning arresters and in one instance the purchase of fabricated steel for transmission towers. Such contracts have been awarded to manufacturers in Switzerland, Austria (British zone), Italy, France, and England. Since the issuance of Executive Order 10582 dated December 17, 1954, which modified previous policy with respect to foreign bids, there has been a substantial increase in the volume of inquiries received from foreign firms, including many from West Germany, concerning equipment requirements and bidding procedures. Foreign equipment so far received appears to be satisfactory. During the calendar year 1955, a considerable amount of this equipment will be placed in operation.

The Bureau has performed technical services for foreign governments, other Federal agencies, States, municipalities, and other corporate entities as well as for individuals, pursuant to the Mutual Security Act of 1951, the United States Information and Educational Exchange Act of 1948, title VI of the act of June 30, 1932 (47 Stat. 417) and the act of March 4, 1921 (41 Stat. 1404). The services consisted of inservice training and observation for foreign engineers, designs and laboratory work, construction drawings, preparation of specifications, evaluation reports, investigation and feasibility reports, and advice on construction methods and equipment. Among the principal work which received technical assistance from the Bureau were the Snowy Mountains hydroelectric scheme, T–1 and Adaminaby Dam, Australia; the Wu-Sheh Dam, Formosa; the Klang Gates Dam, Malaya; the proposed Karaj Dam, Iran; the Taunsa Barrage Dam, Pakistan; the Yan Hee project, Thailand; and the Nahal Shorek Dam, Israel.

Through consideration of mutual problems with representatives of the Associated General Contractors of America, Inc., further improvements have been made in specifications and contract procedures. With the cooperation of the contractors on these matters a continuing program has been carried on to improve specifications and to obtain more uniformity in field operations with the objective of obtaining lower bid prices and improving the quality of construction.

The Renegotiation Act of 1951 (extended 1 year by Public Law 764 or to December 31, 1954) by Executive Order 10369 of June 30, 1951, was made applicable to a large number of construction and supply contracts of the Bureau, including related subcontracts, to the extent of amounts received or accrued on or after July 1, 1952, whether such contracts were made on, before, or after that date. Pursuant to regulations issued by and in accordance with requests of the Renegotiation Board, the Assistant Commissioner and Chief Engineer of the Bureau has submitted numerous performance reports on renegotiable contracts directly to the Board.

New Starts

Chairman Hayden. Would you care to highlight it?

Mr. Nielsen. I suggest that you would not be particularly interested in the highlights, but I would like to review the new starts.

Chairman Hayden. Very well.

CRESCENT LAKE DAM PROJECT

Mr. Nielsen. Specifications for the construction of Crescent Lake Dam were issued in October and the contract awarded on December 30, 1954. Construction was delayed in the spring because of weather, but removal of the old dam structure began on April 25.

HANOVER-BLUFF UNIT-MISSOURI BASIN PROJECT

Specifications for the construction of the 4 Hanover pumping plants, canals, and laterals, and the 2 Bluff pumping plants and laterals have been issued and bids were opened on February 23, 1955. Actual construction is underway.

HEART BUTTE UNIT—MISSOURI RIVER BASIN PROJECT

Specifications for the construction of 25 small pumping plants and associated laterals, drains, and electrical distribution substations were issued in November and the contract awarded on March 4, 1955.

Construction should be completed in December 1955.

Contracts for the purchase of related equipment for the above construction were also awarded on March 4, 1955.

HELENA VALLEY UNIT—MISSOURI RIVER BASIN PROJECT

Specifications for construction and purchase of equipment are dependent on execution of a repayment contract. Hearings on formation of the irrigation district began on May 23.

GLENDO UNIT—MISSOURI RIVER BASIN PROJECT

Specifications for construction of the dam, powerplant foundation, and roads were issued September 1954, and contract awarded November 27, 1954.

The contractor began actual construction in December with the open cut excavation at inlet portal of the tunnel. Excellent progress

has been made to date and, while the specifications allow the contractor until March 1958, to fulfill the contract, it is expected that if the present rate can be maintained and financed the work can be completed 1 year earlier.

A specification for purchase of the penstocks, surge tank, and outlet pipes was issued in January and contract was awarded on March 2, 1955.

The preparation of detailed construction drawings for the dam and powerplant and the design drawings for purchase of related materials and equipment is in progress.

Specifications for railroad relocation on the Glendo Dam and reservoir area are scheduled for issuance late this fiscal year which will permit award of contract early in fiscal year 1956.

ADDITIONAL FUNDS

Chairman HAYDEN. Some additional money has been provided?

Mr. CROSTHWAIT. Yes, sir; $800,000 was authorized for transfer from available funds this year additional to the $1 million originally allotted.

Chairman HAYDEN. What was the necessity for the urgent demand for money?

Mr. CROSTHWAIT. The contractor was proceeding much faster than the funds we could allot him out of the original $1 million and it was economical to let him proceed so that he could go ahead with his work.

Chairman HAYDEN. He would not have to have any shutdown?

Mr. CROSTHWAIT. That is correct.

Mr. NIELSEN. There will be a full year of energy additional out of the earlier completion permitted by the revised financing.

SARGENT UNIT—MISSOURI RIVER BASIN PROJECT

Specifications for the construction of Milburn diversion dam and 2,600 feet on the Sargent Canal were issued in September, and the contract was awarded November 3, 1954. Actual construction started in January 1955.

The contract for construction of the first section of the Sargent Canal, 11 miles in length, was awarded on December 1, 1954. The contractor started work in January 1955.

BOSTWICK DIVISION, LOVEWELL DAM—MISSOURI RIVER BASIN PROJECT

Specifications for road relocation at Lovewell Dam were issued in September 1954, and on February 24, 1955, the work was completed. The prime contract for the construction of Lovewell Dam was awarded November 22, 1954, and the contractor began work in January.

Negotiations are in progress with the Atchison, Topeka & Santa Fe Co. for relocation of its railroad around the dam. Negotiations are also in progress with the Kansas State Highway Department for relocation and raising of the bridge across White Rock Creek on State Highway No. 14.

A formal agreement with Jewell County, Kans., has been signed for the abandonment and relocation of various county roads. This agreement pertains to work to be performed by the Bureau and the county.

TRANSMISSION DIVISION, NEBRASKA-MISSOURI RIVER BASIN PROJECT

Specifications for the construction of the Gavins Point-Belden 115-kilovolt transmission line were issued early in December and award of contract was made February 1, 1955. Completion of construction is scheduled for August 1955.

Chairman HAYDEN. I think we appropriated the last money for the Eklutna project.

Mr. CROSTHWAIT. Yes. The only money involved is O. and M.

GILA PROJECT, ARIZONA

PROJECT DATA

AUTHORIZATION

The project was initiated with funds allotted under the National Industrial Recovery Act (48 Stat. 195) and the Emergency Relief Appropriation Act of 1935 (48 Stat. 115). A finding of feasibility dated June 8, 1937, by the Secretary of the Interior was approved by the President on June 21, 1937. The project was reauthorized by the act of July 30, 1947 (61 Stat. 628). The act of June 13, 1949 (63 Stat. 172), authorized the furnishing of water to the Yuma auxiliary project through the works of the Gila project.

LOCATION

Southwestern Arizona, in the southern part of Yuma County. Project works extend south from Imperial Dam on the Colorado River to approximately 10 miles south of Yuma, Ariz., and east along the lower reach of the Gila River to approximately 50 miles east of Yuma.

DESCRIPTION

The project includes 19,970 acres on the Yuma Mesa, 8,288 acres in the North and South Gila Valleys, near Yuma, and 75,000 acres in the Wellton-Mohawk division, beginning some 12 miles east and terminating approximately 50 miles east of Yuma. The primary purpose of the project is to provide a full water supply to 103,258 acres of arid lands within the project and to 3,305 acres in the Yuma auxiliary project. Four main canal pumping plants are required to deliver water to the distribution systems.

STATUS

The estimated total construction cost has been reduced from the previous $51,131,309 to $47,225,849 (anticipated total obligations $54,822,979). The change is the net result of the inclusion of an estimate for drainage facilities for the Yuma Mesa unit and transfer from the project construction cost estimate of items not associated with construction but which are included for repayment and allocation.

On June 30, 1954, the project was 78 percent complete. Scheduled completion is 87 percent by end of fiscal year 1955 and 96 percent by end of fiscal year 1956. Major items remaining to be completed after fiscal year 1956 are drainage works, final repair of damaged concrete lining in the Wellton-Mohawk division main canals, and minor cleanup.

REPAYMENT

A contract, dated March 4, 1952, was executed with the Wellton-Mohawk irrigation and drainage district for the maximum obligation of $42 million. A contract, dated December 22, 1953, was executed with the unit B irrigation and drainage district (Yuma auxiliary project) under which $456,090 of Gila project obligations will be repaid. A contract, dated May 12, 1953, amended and supple-

mented by a contract, dated June 24, 1954, was executed with the North Gila Valley Irrigation District, under which $108,300 will be repaid for usable works constructed by the Yuma project and a maximum of $366,700 of Gila project obligation will be repaid. Repayment contract negotiations have been initiated, and are well underway, with the Yuma Mesa irrigation and drainage district, which was formed in January 1954. Execution of a repayment contract with the new district is anticipated prior to the expiration of the 10-year development period for the first irrigation block in 1956. A complete evaluation of project costs and repayment plans is currently in progress by the Bureau of Reclamation.

Repayment of costs allocated to irrigation

Water users	[1] $49, 120, 575
Total	49, 120, 575

[1] Includes $1,894,726 for Gila share of All-American Canal facilities.

Repayment costs per acre

Federal investment, per acre	$476. 00
To be repaid:	
From water users	476. 00
From power revenue	-------
Annual water users' charges:	
Construction	7. 93
Operation and maintenance	9. 25
Total	17. 18

Gross crop income per acre resulting from project irrigation (actual for crop year 1953), $204.

HISTORY OF PROJECT DEVELOPMENT

Initial date:
Planning, 1934.
Advanced planning, 1935.
Construction: Yuma Mesa division, 1936, Wellton-Mohawk division, 1949.
Date of functional completion of construction: Fiscal year 1956.
Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1936, $2 million.

Construction costs

Original estimated cost	$19, 474, 964
Allocation of cost: Irrigation	19, 474, 964
Total construction cost	47, 225, 849
Gila share of All-American Canal	1, 894, 726
Present estimated project cost	49, 120, 575
Allocation of cost: Irrigation	49, 120, 575

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation:				
Full	62, 108	83, 558	103, 258	103, 258
Total	62, 108	83, 558	103, 258	103, 258

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$54,822,979
Total obligations to June 30, 1954		44,270,806
Allotment, fiscal year 1955	$4,273,200	
Prior year balance available	576,136	
Balance available in subsequent year	−443,993	
Total obligations, fiscal year 1955		4,405,343
Allotment, fiscal year 1956	$3,500,000	
Prior year balance available	443,993	
Total obligations, fiscal year 1956		3,943,993
Balance to complete		2,202,837

WORK PROPOSED, FISCAL YEAR 1956

Project common features

Completed facilities.—Includes diversion works and a section of the main canal completed in prior years.

Drains ($30,000).—North Gila drains Nos. 1, 2, and 3, along the gravity main canal, are complete except drain No. 2. Funds requested are required to extend drain No. 2 from the Redondo gravel pit to the Gila River. The extension will permit draining the gravel pit, the temporary terminus of drain No. 2, and alleviation of high ground water table problem in the area.

Yuma Mesa Division

Completed facilities.—Includes a section of the main canal, the "A" and "B" canals and laterals and Yuma housing completed in prior years. These facilities are now in use.

Yuma Mesa pumping station.—By end of fiscal year 1955 installation of facilities to permit complete control of the plant from the Gila substation will have been completed.

North Gila Valley laterals.—Connection to and service from the gravity main canal to the North Gila Valley Irrigation District was made effective on January 1, 1955, to complete all work on these laterals.

Drains—Yuma Mesa division area ($10,000).—Funds requested are required for continuation of the program of observing groundwater conditions in the North and South Gila Valleys and on the Yuma Mesa. Continuation of observations and maintenance of records of ground water elevations are necessary to anticipate development high ground water conditions in the irrigated areas in sufficient time to permit corrective measures.

Drains—Yuma Mesa unit facilities.—This feature was established in fiscal year 1955, to meet an emergency high ground water condition on the Yuma Mesa. Methods developed in alleviating the high ground water condition on a 340-acre area in section 28, T. 9 S., T. 23 W. will permit determination of type of treatment required to maintain ground water elevation at safe levels on the Yuma Mesa. No funds are requested for fiscal year 1956.

Wellton-Mohawk division

Completed facilities.—Includes the mesa and valley development farms, water users building and purchased facilities from Mohawk Municipal Water Conservation District and Gila Valley Power District. All facilities are now in use.

Pumping plant Nos. 1, 2, and 3.—By end of fiscal year 1955 all pumps, motors, and miscellaneous equipment will be installed and the plants will be completed to ultimate capacity.

Wellton-Mohawk Canal ($40,000).—Construction of the main supply canal for the division is complete; however, soon after it was placed in operation there was considerable displacement of the concrete lining as a result of action of expansive clays. Temporary lining repair was made in fiscal year 1953 pending complete expansion of clays. Funds requested are required for final lining repair on those sections of the canal where the action of expansive clays has ceased.

Mohawk Canal ($59,439).—Construction of the canal is complete with exception of two additional road crossing structures which have been requested by the Wellton-Mohawk Irrigation and Drainage District. Soon after it was placed in operation there was extensive displacement of the concrete lining by action of expansive clays. Temporary lining repair was made in fiscal year 1953 pending

complete expansion of clays. Funds requested in fiscal year 1956 are required for construction of two timber bridges and final repair of those sections of the canal where expansive clays have completed their expansion. The final lining repair will be completed in fiscal year 1957.

Wellton Canal ($40,000).—Construction of the canal serving the Wellton area is complete; however, soon after it was placed in operation there was considerable displacement of concrete lining due to action of expansive clays. Temporary repair of the damaged lining was made in fiscal year 1953 pending completion of action by the expansive clays. Funds requested are for final repair of the damaged lining on these sections of the canal where the clays stopped expanding.

Mohawk unit-laterals ($1,920,208).—Construction will be completed on Mohawk lateral unit No. 4 which was placed under contract in December 1954. Construction will also be completed on the Mohawk laterals in the Ralph's Mill area (previously designated Ralph's Mill unit laterals) under a contract to be awarded late in fiscal year 1955. Supporting activities, will be continued including payments on contracts supplying minor relift pumping units in the Ralph's Mill area.

Wellton unit, laterals.—The Wellton lateral system will be complete and in operation by the end of fiscal year 1955.

Dome unit laterals.—All laterals in the Dome area will be complete and in operation by the end of fiscal year 1955.

Texas Hill unit laterals ($1,783,834).—Construction will be continued on the Texas Hill laterals under a contract to be awarded late in fiscal year 1955. The funds will be needed to complete payment on contract earnings on the construction contract and for supporting activities including payments on contracts for supplying relift pump equipment for the main supply laterals. Construction of the unit will be completed in fiscal year 1957.

Wellton-Mohawk Canal unit laterals.—All Wellton-Mohawk Canal laterals will be complete and in operation by the end of fiscal year 1955.

Drains-Wellton-Mohawk area ($40,000).—The program of groundwater observations and maintenance of a continuing record of groundwater elevations will be continued as a means of advance determination of potential problem areas that may need installation of drainage works. Funds requested will be required for above studies and for preparation of specifications for construction of the first section of the Wellton-Mohawk main drain adjacent to the Gila River Channel.

W-M transmission lines and substations ($125,642).—Service lines to the relift pumps in the Dome area will be completed by the end of fiscal year 1955. Funds requested will be required for reconducting the main transmission line to the Texas Hill area to provide capacity for relift pumps along the Mohawk Canal and in the Texas Hill lateral unit.

Wellton housing and facilities and miscellaneous general property ($85,000).—The Wellton Government camp is complete and has been in service several years. By the end of fiscal year 1955 the Wellton-Mohawk irrigation and drainage district will have been supplied various units of operation and maintenance equipment necessary in connection with the care and operation of irrigation blocks Nos. 1 and 2 which they assumed on January 1, 1955. Funds requested will be required to purchase additional operation and maintenance equipment which will become necessary as the district assumes care and operation of additional irrigation blocks. The equipment will be transferred to the district under terms of the act of July 29, 1954 (68 Stat. 580).

Chairman HAYDEN. On the Gila project in Arizona you are asking for new funds of $3,500,000?

Mr. CROSTHWAIT. That is correct.

Chairman HAYDEN. How far will that go toward the completion of the project?

Mr. NIELSEN. It will be 96 percent complete by the end of fiscal 1956.

Chairman HAYDEN. And they are now taking over the operation and maintenance of the project?

Mr. NIELSEN. Just as fast as works are ready and they are able to accept that responsibility.

Chairman HAYDEN. There was some difficulty about the power supply for pumps on that unit?

Mr. NIELSEN. We think it is all straightened out. The contract for our participation in their transmission and distribution facilities is signed, sealed and delivered and blessed by the REA.

So we think they are in good shape. I have a statement for the record on that.

(The statement referred to follows:)

RECONDUCTORING THE WELLTON-MOHAWK TRANSMISSION LINES

As provided by the act of July 30, 1947 (61 Stat. 628) the Bureau of Reclamation acquired the power system of the Gila Valley Power District in conformance with an appraisal theretofore made and at prices within limitations contemplated by the act. Following dissolution of the Gila Valley Power District and the Mohawk Municipal Water Conservation District in 1951, the power system was transferred to an interim operating group pending organization of an irrigation district qualified to contract with the United States. That district was organized and a repayment contract governing the construction of irrigation works and repayment of costs, including the cost of the acquired power system, executed on March 4, 1952. Shortly thereafter the previously mentioned power facilities were transferred to the Wellton-Mohawk Irrigation and Drainage District. In negotiating the contract of March 4, 1952, it was recognized by both the Government and the district that relift pumps would be required and an increase in the transmission system capacity would be required to serve these relift pumps. In a memorandum approved by Assistant Commissioner Lineweaver in 1951 the United States assumed responsibility for reconductoring the district's power system.

In May of 1953 Bureau engineers made a survey of the existing power system in the Wellton-Mohawk Irrigation and Drainage District to determine the investment which would be necessary to increase the capacity of this system and make possible service to the Gila project relift pumps. It was found at that time that installing larger conductor on existing transmission and distribution lines would not be feasible due to the extremely poor condition of the existing poles. A report was prepared outlining several plans which could be followed and which would require varying degrees of financial participation from the district. The district in the meantime had applied for an REA loan to finance rebuilding and extension of all existing transmission and distribution facilities. After review of the above report, it was decided that the Bureau's participation should be limited to an expenditure of funds equivalent to the cost of reconductoring the existing lines and building only necessary extensions to the relift pump sites. The engineers' preliminary cost estimate for this work was $207,000.

The district has now obtained a sizable loan from REA to be used for rehabilitation and extension of the power system in the Wellton-Mohawk area. The district has indicated a willingness to construct a system which would carry the Bureau's relift pumping loads and also the domestic load which the district expects will materialize as the project is completed and farms are settled. The Bureau is presently negotiating with the district on the basis that the Bureau will advance money to the district for use in construction purposes in an amount which would be equal to the Bureau's proportionate use of the proposed district system. In return for making this advance the Bureau will obtain a perpetual right to use of the district system for transmission of power for project purposes. The value of the Bureau's share in the cost of the rehabilitation and extension of the district's power system was estimated to be $175,000 and the district has accepted this sum as adequate. A contract which will include the provisions mentioned in this paragraph has been drafted and it is expected that it will be executed in the near future.

PALO VERDE PROJECT, ARIZONA-CALIFORNIA, PROJECT DATA

AUTHORIZATION

Public Law 752, 83d Congress, approved August 31, 1954.

LOCATION

Along the Colorado River in the States of Arizona and California, 58 miles downstream from Parker Dam.

DESCRIPTION

Consists of the Palo Verde diversion dam, a rock and earth fill structure on the Colorado River. The dam will provide diversion of river water into the irrigation system of the Palo Verde Irrigation District and will replace a temporary rock weir completed in 1945 which was required by the retrogression of the Colorado River.

Appurtenant works will include a spillway with a normal design capacity of 75,000 second-feet and canal headworks with a capacity of 1,800 second-feet. The project will also include construction of levees and drainage canals upstream from the dam to protect river bottom lands in the Colorado Indian Reservation against floods of 75,000 second-feet or less. On the Arizona side the levee will be nearly 22 miles long and on the California side about 8 miles. The project also includes a $500,000 loan authorized by law to the irrigation district for modification of its existing work to conform to the new dam.

STATUS

A definite plan report for the diversion dam will be complete in fiscal year 1955, and designs and specifications for the diversion dam prepared for issuance early in fiscal year 1956. A repayment contract will be executed during fiscal year 1955 for the amount to be repaid by the irrigation district.

REPAYMENT

The authorization act provides that $1,175,000 of the cost of the dam and the $500,000 loan for modification of canals shall be repayable by the Palo Verde Irrigation District. The balance of the project is nonreimbursable.

HISTORY OF PROJECT DEVELOPMENT

The proposed diversion dam is required to replace an existing rock weir which the Government is presently maintaining. This weir is a temporary structure.

Initial date: Advance planning, 1955; construction, 1956.

Date of functional completion of construction: Fiscal year 1958.

Construction costs

Original estimated cost (1954): $6,599,000. Present estimated cost: $6,599,000. The total project cost estimate is $6,599,000, in addition there will be a $500,000 loan to the irrigation district. The costs at the end of fiscal year 1956 will be $190,000 for investigations and advance planning.

SCHEDULE OF DEVELOPMENT

Construction of the diversion dam, levees, and drains will start early in fiscal year 1956 and be completed during fiscal year 1958.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$6,909,000
Allotment, fiscal year 1956	$1,985,000	
Total obligations, fiscal year 1956		1,985,000
Balance to complete		4,924,000

Work proposed, fiscal year 1956

Diversion dam ($1,095,500): Award of contract for construction is proposed during October 1955 and funds will be required for progress earnings during the remainder of the fiscal year.

Drains ($230,000): Award of contract for construction is proposed during October 1955 and funds will be required for progress earnings during the remainder of the fiscal year. This schedule coordinates completion of drains with functional completion of the diversion dam.

Levees ($229,000): Award of contract for construction is proposed during October 1955 and funds will be required for progress earnings during the remainder of the fiscal year. This schedule coordinates completion of levees with functional completion of the diversion dam.

Palo Verde Project

Chairman Hayden. Will you please take the Palo Verde project next? This is a new start, for which the total estimate cost is $6,909,000; and the estimate for 1956 is $1,985,000.

DESIGN OF PROJECT

Mr. Nielsen. This is a project designed to replace an existing rock weir that has been there since about 1944 or 1945, a very hazardous means of diversion for the Palo Verde Irrigation District.

The proposal is to build an earth and rock dam just below the present weir. It will have diversion capacity of 1,800 second-feet to serve the Palo Verde Irrigation District.

Upstream from the dam itself are about 28 miles of levees in Arizona and in California to protect existing developments from the effect of backwater from the dam. There must be back of the levees a drainage ditch to take care of seepage from the river.

This year we have spent some money in getting ready to contract for construction and we will be in good shape at the beginning of this fiscal year, if funds are available, to issue specifications and start work.

Chairman Hayden. If this dam had not been built the river would not have scoured back the base of the headgate rock dam and lowered its channel and therefore it would not have been necessary to build the levees on the Arizona and California sides.

Am I correct about that?

Mr. Nielsen. Yes, sir.

Chairman Hayden. But this sediment placed in the river raises the level of the water and, therefore, to play safe, you have levees on both sides of the river to confine the river to its channel.

Mr. Nielsen. That is right.

PAYMENT OF COST OF LEVEES

Chairman Hayden. Who pays for the cost of those levees?

Mr. Nielsen. Those are principally for the protection of Indian lands and are nonreimbursable.

Chairman Hayden. The money is to be appropriated to build the levees, but inasmuch as they protect Indian lands that part is not reimbursable?

Mr. Nielsen. That is right.

Chairman Hayden. That is so provided in the act?

Mr. Nielsen. That is right.

Chairman HAYDEN. Let us talk about the river channel a little further down. Is it scouring out so that in the course of time there will not be the ground water situation, in the Palo Verde Valley in both the California and Arizona sides that makes it impossible to cultivate some of the lands?

Mr. NIELSEN. We will have to provide a rectified channel through that area before we can expect the river to maintain itself at a level low enough to accomplish that drainage.

Chairman HAYDEN. There is some very valuable land on both sides of the river?

Mr. NIELSEN. Most valuable, yes.

Chairman HAYDEN. Where are you going to get the dredge?

Mr. NIELSEN. We have a dredge, Senator. We have not had the money this year to operate it.

At the present level of the budget request we won't have money enough to operate it in fiscal year 1956.

Incidentally, the dredge is now tied up at Needles and we have not completed that stretch of dredging.

DREDGING IN NEEDLES, CALIF., AREA

Chairman HAYDEN. You were flooding out the town of Needles, Calif., by the backwater and silt that was deposited.

Mr. NIELSEN. That is right.

Chairman HAYDEN. Has that channel been dredged out so that Needles is now safe?

Mr. NIELSEN. We have partially completed a pilot channel through the Needles area and have secured really beneficial results. We still need to do some work upstream to get a proper entrance into that channel.

We ran out of funds. We have not completed that appropriate entrance channel at the upstream end, and, possibly worse, that channel is suffering from lack of maintenance.

So we are losing day by day the effect of the good work which had been previously accomplished.

Chairman HAYDEN. Was it your idea that if the work was completed in the vicinity of Needles that then the dredge could be moved down the river to protect the Palo Verde Valley?

Mr. NIELSEN. We intended to come to Congress with a report which would show the justification, if justification existed, for channelization of that stretch through Palo Verde and Cibola Valleys.

Chairman HAYDEN. That could be done with the same dredge?

Mr. NIELSEN. Yes. It was built purposely so it could be moved around the dams.

Chairman HAYDEN. If it was taken out of that reach of the river between Parker Dam and above Needles, would another dredge have to be put in there at some other date, or can you fix a firm channel that will keep the river where it belongs?

Mr. NIELSEN. We think we can develop a mature channel through the Needles area which would require only nominal maintenance in the years to come. We expect that someday we will have to come to Congress and get a smaller dredge to accomplish maintenance.

There is always going to be a problem on the Colorado River.

Chairman HAYDEN. You would think that at sometime the river would equate its flow back up to Davis Dam and not go any lower.

Mr. NIELSEN. We always have the side washes to contend with, for one thing. We expect we will have to do some nominal maintenance wherever we establish a mature channel.

Chairman HAYDEN. Once the main job is completed?

Mr. NIELSEN. That is right.

LOAN TO PALO VERDE IRRIGATION DISTRICT

Chairman HAYDEN. I understand in this estimate there is a half million dollars that is being loaned to the Palo Verde Irrigation District.

Mr. NIELSEN. Yes, sir.

Chairman HAYDEN. What are the conditions of reimbursement on that?

Mr. NIELSEN. We have a contract approved—it may be signed by now—under which they would pay the reimbursable portions of the cost of Palo Verde Dam and repay the loan which will be given to them.

Chairman HAYDEN. What is this loan money of $500,000 to be used for?

Mr. NIELSEN. That loan is for the purpose of accommodating their canals to the new headworks situation. They have had some small amount of pumping out of their headworks and generally speaking they are going now to have to lower their canals a little and at the head end of the canal they are going to have to do a major job of reconstructing to accommodate themselves to the new diversion facility.

Chairman HAYDEN. In other words, before these various dams were built on the river and the Colorado was flowing in a normal way, they had a headgate that was higher up than is possible now?

Mr. NIELSEN. That is right.

Chairman HAYDEN. So they did not have to dig their canals so deep?

Mr. NIELSEN. That is right.

Chairman HAYDEN. But to balance this out you had to lower the head and in that case you have to do some other work?

Mr. NIELSEN. They have to knock some grade from the upper reaches of their canals and put in some control works.

SANTA MARIA, CALIF., PROJECT

PROJECT DATA

AUTHORIZATION

The Santa Maria project was authorized by Public Law 774 (68 Stat. 1190) approved September 3, 1954.

LOCATION

The project works are located on the Cuyama River in the northern part of Santa Barbara County, Calif. The project lies in the Santa Maria Basin about 60 miles northwest of the city of Santa Barbara. The city of Santa Maria is located in the center of the service area of approximately 50,000 acres.

DESCRIPTION

The plan of the project has a dual purpose: (1) To provide adequate recharge of the now critically depleted irrigation groundwater reservoir underlying the

Santa Maria Valley; and (2) To eliminate the threat of extensive flood damage to cities, industries and agriculture of the valley.

The plan represents the closely integrated planning efforts of the Bureau of Reclamation and the Corps of Engineers. The features for recharging the ground water are to be constructed by the Bureau and the system of flood-control levees constructed by the Corps of Engineers.

The features of the project will consist of an earth-filled dam on Cuyama River and a reservoir of 214,000 acre-feet, of which 89,000 acre-feet are allocated for flood control. The plan of operation is essentially to release the stored water into the river bed at a rate equal to or less than the percolation capacity of the Santa Maria River Channel. With the project reservoir the water supply will be sufficient to overcome the present overdraft and to irrigate an additional 3,000 acres. The project is additionally unique in that all holdover storage would be maintained in ground-water reservoir and no surface water delivery to irrigation is contemplated.

STATUS

As of June 30, 1954, the feasibility report of the project had been prepared and submitted. The investigations program in fiscal year 1955 contemplates the preparation of the definite plan report in order that construction can be initiated in fiscal year 1956. Prior to fiscal yer 1956 all funds expended have been general investigations funds, and construction funds are contemplated for initial use in fiscal year 1956.

REPAYMENT

Repayment of the Santa Maria project will be covered by a 9 (d) contract with the Santa Barbara County Water Agency and the Santa Maria Valley Water Conservation District. The development period is tentatively estimated at 2 years and the repayment period is established by law at 50 years.

The repayment contract is expected to be executed by July 1955.

Amount to be repaid and repayment period

	Amount	Repayment period		
		Regular	Development	Total
Irrigation	$13,969,000	1961 to 2011	2	52
Flood control	3,013,000			
Total	16,982,000			

Repayment costs per acre

Federal investment, per acre	$305.00
From water users	250.00
From Santa Barbara County, water agency	55.00
To be repaid, annual water users' charges:	
Construction	5.00
Operation and maintenance	.90
Total	5.90

Gross crop income per acre resulting from project irrigation, $96.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1942; advance planning, 1955; construction, 1956.

Date of functional completion of construction: 1959.

Fiscal year and amount of initial allotment of appropriation for construction, fiscal year 1956, $1 million.

Construction costs

Original estimated cost (1954)	$16,982,000
Present estimated cost	16,982,000

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$16, 689, 751
Total obligations to June 30, 1954		----------
Total obligations, fiscal year 1955		----------
Allotment, fiscal year 1956	$1, 000, 000	
Total obligations, fiscal year 1956		1, 000, 000
Balance to complete		15, 689, 751

Work proposed, fiscal year 1956

Vaquero Dam and Reservoir ($950,000).—The program provides for the completion of designs and specifications for the dam structure and for the award of the construction contract for the dam in April 1956. Specifications will be issued for the relocation of roads and utilities. Land will be acquired for the dam site and highway. Temporary field offices and other construction facilities will be completed.

Chairman HAYDEN. The next new one is the Santa Maria project in California of $1 million.

Mr. CROSTHWAIT. Senator, this project was authorized by Public Law 774 in the last Congress and approved by the President on September 3, 1954.

Our estimate for its construction runs $16,982,000. The project is located about 60 miles northeast of the town of Santa Barbara. It has dual features.

First, it will provide for the release of water from the dam down to the riverbed at a sufficient rate to recharge the ground-water reservoir.

Second, it will provide the needed flood control for the area below the dam.

Chairman HAYDEN. Has there been damage by floods?

Mr. CROSTHWAIT. There has been in the past because of that stream which occasionally has flash floods.

Chairman HAYDEN. My recollection is that the 160-acre limitation does not apply to this project.

Mr. CROSTHWAIT. That is correct. This will only recharge the ground water and they will get it in the same manner as before through pumping.

We are building no irrigation structures other than the dam which will release the water at a sufficient rate to recharge the ground water.

Chairman HAYDEN. How far from the dam is it to where they first begin pumping?

Mr. CROSTHWAIT. My recollection is that they will begin pumping fairly close to the release of the water down that valley. They are now pumping in that area, but the ground water level has gone down to the extent that they need to have the excess water stored and then released so as to maintain the level of the ground water so that they can maintain their pumping during the irrigation season.

We are building no irrigation structures as such, that is, no canals or laterals.

Chairman HAYDEN. So whatever the ownership was you could not disturb it under those circumstances?

Mr. CROSTHWAIT. That is correct.

Chairman HAYDEN. Maybe I am going too fast. Have you any particular problems you want to bring to the attention of the committee for the projects that are listed ahead of the Santa Maria, or are they proceeding in what we might call a normal way?

COLORADO RIVER FRONT LEVEE SYSTEM

Mr. NIELSEN. I think we might take up one or two here. I have told you about the Colorado River front work and levee system and the effect of the lack of funds for dredging.

Chairman HAYDEN. Yes.

Senator KNOWLAND. What did you request there? You have an estimate of about $145,000.

Mr. NIELSEN. Our problem developed there because the funds are included in our overall O. and M. estimate. When the O. and M. estimate was cut to conform to the budget allowance we necessarily had to cut maintenance.

Mr. CROSTHWAIT. When we reduced our overall estimate of $28,037,000 for O. and M. to the $24 million which the budget allowed, the estimate on the Colorado River front work was reduced from $1,247,000 to $491,000. That is under the O. and M. appropriation item.

Senator KNOWLAND. Quite a substantial reduction.

Mr. CROSTHWAIT. Yes, sir.

Senator KNOWLAND. It is poor economy not to conduct O. and M. work on these projects.

Chairman HAYDEN. Yes.

How much would it take to keep that dredge going and take care of the situation at Needles?

Mr. CROSTHWAIT. Our estimate as submitted to the budget for Colorado River front work and levee system was $1,247,000. In adjusting the O. and M. fund down to the $24 million we reduced that item to $491,000, which means approximately $750,000 in the way of a reduction. It is the amount which would be required to meet our estimate on that project.

I presume most of that was for the dredge operation.

Chairman HAYDEN. What is included under the title of Colorado River front work?

Mr. NIELSEN. It is rectification and control of the Colorado River as distinguished from operation and maintenance of Hoover, Davis, and Parker Dams.

Chairman HAYDEN. Is it all confined to the area between the Parker Dam and Davis Dam?

Mr. NIELSEN. No, sir. Actually the authorization goes from Lee Ferry to the Mexican border.

FUNDS NEEDED TO CONTINUE DREDGING

Chairman HAYDEN. That is what I thought. How much would it cost to keep that dredge going so that a good job could be done to protect the town of Needles and the rest of the area involved?

Mr. NIELSEN. About three-quarters of a million more than we can allow this year, or a total of $1,247,000 in the O. and M. item which we thought was an appropriate program for keeping that dredge going this coming year.

Chairman HAYDEN. If you kept it going at a reasonable rate how long before the job would be done?

Mr. NIELSEN. That is hard to answer, sir, because we don't know what work can be fully justified in terms of returns. We don't know

today, for example, whether the money which it would cost to rectify the channel through Palo Verde Valley would justify the cost.

Chairman HAYDEN. I am talking about the job above Parker Dam at Needles before you move the dredge away.

Mr. NIELSEN. I will have to get that estimate for the record.

Senator KNOWLAND. I think if we could get those figures perhaps this committee could put additional funds in there. Certainly we should have sufficient to protect our works there. It would be poor economy not to have it.

Obviously we do not want to supply more funds than you need to do the work, but I do feel that you can use some additional funds here.

Mr. NIELSEN. This is our estimate of what we can use economically in the next year, and I can give you the cost to complete the stretch of the river.

(The information referred to follows:)

COLORADO RIVER FRONT WORK AND LEVEE SYSTEM, DAVIS DAM TO TOPOCK

The Colorado River front work and levee system project consists of 2 phases: 1, initial construction of a levee system and channel rectification and 2, the continuing maintenance of the channel and associated levees once they have been built.

In the Davis Dam-Topock section of the river the cost of initial construction, including $916,800 already expended, is estimated at about $5,200,400. Of this latter amount, $2,353,100 is for channel dredging. Under regular 3-shift per day, 5-day per week operation of the Bureau's dredge, about 4 years work will be required to complete the job. While in some cases, material dredged from the channel must be disposed of by wasting, most of the material for levee embankments will be secured from the dredging operations. Thus, effective use of dredge is the key to prompt completion of the project at lowest possible cost.

Since project construction must be keyed to dredge operations, available funds should be sufficient to provide for dredge operation plus those other costs associated with construction of embankments and their protective works. A proposed schedule for project construction would provide about $1 million per year over a 4-year period.

Funds for operation and maintenance must be provided in addition to the initial construction costs. Because of the nature of the problem, the control of an unstable river, a considerable amount of repair and revision of the original work must be expected. This is treated as maintenance and is expected to vary in cost.

In the Davis Dam-Topock reach of the river, dredging to maintain the completed channel during the 4-year construction period, and for 5 years thereafter, is expected to amount to about $400,000 annually. In the following 10 years the cost is expected to drop to about $200,000 annually. Thereafter, 1 year of channel dredging is expected in every 10 years at an average annual cost of about $40,000. Other maintenance costs, exclusive of dredging, will begin after completion of the channelization plan and are expected to average about $170,000 per year.

The prompt and efficient completion of the work proposed in the Davis Dam-Topock section of the river, therefore, would require an allocation of about $1,600,000 for each of the next 4 years, and of about $600,000 for each of the 5 years thereafter.

Senator KNOWLAND. Mr. Chairman, I have to go to the Senate.

Chairman HAYDEN. Certainly, Senator Knowland.

You mentioned some other projects.

Mr. NIELSEN. Yes, sir.

BOULDER CANYON PROJECT

PROJECT DATA

AUTHORIZATION

Boulder Canyon Project Act of December 21, 1928 (45 Stat. 1057) as revised by the Boulder Canyon Project Adjustment Act of July 19, 1940 (54 Stat. 774).

LOCATION

In the Black Canyon of the Colorado River on the Arizona-Nevada States boundary, 30 miles east of Las Vegas, Nev., and 7 miles northeast of Boulder City, Nev.

DESCRIPTION

The project consists of Hoover Dam and appurtenant outlet works, spillways, powerplant, and transmission and switching facilities for delivery of power to high voltage transmission lines of the power allottees. The primary purpose of the project is to regulate the flow of the Colorado River for control of floods, for irrigation and municipal water supplies, for improvement of navigation, and for generation of electrical energy. The Hoover powerplant is designed to have an installed capacity of 1,354,300 kilowatts.

The project also includes Boulder City, which is an outgrowth of the Boulder Canyon project.

Under the provisions of the Boulder Canyon Project Adjustment Act, the city of Los Angeles, and the Southern California Edison Co., as agents for the United States, operate and maintain certain powerplant machinery and pertinent facilities. Operation and maintenance costs incurred by the agents in operating and maintaining the machinery and facilities are not reflected in estimates presented by the United States, except for an amount of $50,000 of operation and maintenance funds which represents work to be performed by the United States for, and reimbursed by, the operating agents.

STATUS

The total estimated cost of the project has been increased from $172,660,000 to $173,100,000 (anticipated total obligations, $164,767,000) due to scheduling minor improvements not formerly included in the construction program and the addition of a 22,000 kilovolt-ampere transformer bank for 69-kilovolt service. Construction began in 1931 and on June 30, 1954, the project was approximately 97 percent complete. The installed capacity of the Hoover powerplant on June 30, 1954 was 1,249,800 kilowatts. There remains only one position for a generating unit to be filled for full utilization of the plant. Contracts for the N8 turbine and generator, the last unit, are scheduled for award late in fiscal year 1955.

REPAYMENT

With the exception of $25 million allocated to flood-control purposes by the enacting legislation, the costs of construction, operation, and maintenance, and replacements will be repaid to the United States with interest at 3 percent per annum by revenues from power and water storage benefits of Lake Mead, and these returns are adequately guaranteed by formal contracts with the power allottees, on the basis of repayment of construction costs within a 50-year period.

HISTORY OF PROJECT DEVELOPMENT

Initial date:

Planning, 1902, shortly after passage of Reclamation Act, planning was begun for storage on the lower Colorado River.

Advanced planning, 1929, the Boulder Canyon Project Act was declared effective June 25, 1929.

Construction, 1931.

Date of functional completion of construction: Fiscal year 1958.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1930, $10,660,000.

Construction costs

Original estimated cost (1928)	$126,500,000
Allocation of cost:	
Power	101,500,000
Flood control	25,000,000
Cost, Hoover Dam and powerplant	173,100,000
Cost, Boulder City municipal office	171,700
Present estimated cost	173,271,700
Allocation of cost:	
Power	148,271,700
Flood control	25,000,000

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Power (kilowatts)	1,249,800	1,249,800	1,249,800	1,354,300
Average power rates (mills per kilowatt-hour):				
Firm	2.29	2.29	2.29	2.29
Nonfirm	0.443	0.443	0.443	0.443

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$164,767,000
Total obligations to June 30, 1954		158,803,771
Allotment, fiscal year 1955	$984,000	
Prior year balance available	192,000	
Balance available in subsequent year	−916,000	
Total obligations, fiscal year 1955		260,000
Allotment, fiscal year 1956	$200,000	
Prior year balance available	916,000	
Total obligations, fiscal year 1956		1,116,000
Balance to complete		4,587,229

Work proposed, fiscal year 1956

Hoover Dam and Reservoir.—This feature completed in prior years and now in operation.

Hoover powerplant ($996,000).—This amount will be necessary for preparation of specifications, invitations to bid, award of contracts, and progress payments for furnishing and installing equipment for unit No. 8 in Hoover powerplant, and for progress payments on generator, turbine, and butterfly valve to be awarded in fiscal year 1955.

Hoover switchyard ($130,000).—This amount will be required for preparation of specifications, invitations to bid, award of contracts, and progress payments for furnishing materials for 22,000-kilovolt-ampere transformer bank for 69-kilovolt service.

General property (dam and reservoir) ($140,000).—This amount will be required for preparation of specifications, invitations to bid, award of contract, and progress payments for construction of a sewage treatment plant for Hoover Dam, for improvements at No. 2 warehouse, alterations to communications equipment and the purchase of minor items of project equipment.

General property (investment retained by Boulder Canyon project).—Feature completed and in service.

General property (Boulder City investment transferred to Boulder City municipal project).—Feature completed and in service.

BOULDER CANYON PROJECT, BOULDER CITY MUNICIPAL OFFICE, NEVADA, PROJECT DATA

AUTHORIZATION

The Boulder City Municipal office is technically a part of the Boulder Canyon project. It was established as a separate entity by order No. 2650 of the Secretary of the Interior, dated July 27, 1951. The Boulder Canyon project was authorized by the Boulder Canyon Project Act of December 21, 1928 (45 Stat. 1057).

LOCATION

Boulder City is located in southern Nevada, about 7 miles west of Hoover Dam and 23 miles southeast of Las Vegas on United States Highway 93. The city is built entirely on reclamation withdrawn land.

DESCRIPTION

The townsite is about 2 square miles in area with a population of about 4,000. Originally constructed for the purpose of housing personnel working on Hoover Dam, the town now provides facilities for Government employees of the Bureau of Reclamation, the Bureau of Mines, and the National Park Service. The department of water and power, city of Los Angeles, and the Southern California Edison Co., which agencies operate the generating equipment at Hoover Dam and powerplant as representative of the power allottees, also have employees living in Boulder City. In addition to the employees directly connected with the Government or associated endeavors, there is a considerable number of persons who operate private business establishments, as well as persons employed outside of Boulder City, and a substantial number of retired persons.

In order to establish adequate facilities for a population of 4,000, the city has provided a city management, police and fire protection, health and sanitation supervision, and maintenance departments for streets, sidewalks, and streetlights; parks, lawn, and parkways; water and electric system; public buildings; and Government-owned dwellings.

The Secretarial order establishing administrative segregation between the Boulder Canyon project and the Boulder City municipality also provides for a Boulder City municipal office under the supervision of a city manager appointed by the Commissioner of the Bureau of Reclamation and the establishment of an advisory council composed of respresentatives of the local residents, the power allottees, the director of region 3 of the Bureau of Reclamation and other Interior agencies having employees in the area.

STATUS

The status of Boulder City from the standpoint of "completion" cannot be measured as a power or irrigation project would be. It started with the building of the dam in 1931, and as long as the Federal Government has jurisdiction and the city continues to increase in population, the program will show continued growth. The separate schedule of construction program starts with the installation of a city manager and does not carry a program beyond 1957 since special legislation is being prepared for congressional action to liquidate the Government ownership of property and terminate the Federal control over the city.

REPAYMENT

The repayment status of Boulder City is related to the Boulder Canyon project since the city is still legally a part of the Boulder Canyon project and the repayment status is considered as a whole and is provided in the general regulations of the project. The Appropriation Committees of both Houses have recently been furnished a report on the segregation of nonproject costs required by Public Law 841, 80th Congress.

COSTS

Capitalized investment costs are carried as part of Boulder Canyon project costs.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$171,700
Total obligations to June 30, 1954		71,700
Allotment, fiscal year 1955	$30,000	
Total obligations, fiscal year 1955		30,000
Allotment, fiscal year 1956	50,000	
Total obligations, fiscal year 1956		50,000
Balance to complete		20,000

Work proposed, fiscal year 1956.

Water plant.—Installation of extensions deferred.

Electric plant.—Service to new areas deferred.

Streets, sidewalks and parks.—Completed in prior years.

Sewer system, plant ($50,000).—Sanitary conditions require that work be done at the disposal plant to eliminate objectionable odors. This is the estimated cost of a trickling filter to be added to the sewage disposal plant and making a limited number of connections for new residences. In the early days, the residential areas were far enough away so that the odors from the system were diffused before reaching the edge of town. The town has now grown to the point where further development in the direction of the disposal plant cannot be allowed until the plant is modernized to meet health standards imposed by State authorities.

Municipal buildings.—Transfer of the library deferred.

Purchase of equipment.—Required equipment acquired in prior years.

Mr. NIELSEN. On the Boulder Canyon project we have been trying to get that last generator and turbine in Hoover for some time. We have money this year for it.

We anticipate that during next year we will be able to get a contract for that last unit. We don't have it to date, but the last word I had from Boulder City was that the State of Nevada and the city of Los Angeles are just about together on a contract under which they will commit themselves.

CENTRAL VALLEY

PROJECT DATA

AUTHORIZATION

Construction of the Central Valley project was started under the Emergency Relief Appropriation Act, 1935 (49 Stat. 115), and subsequently authorized by a finding of feasibility by the Secretary of the Interior, approved by the President on December 2, 1935. Additional authorizations were made by the Rivers and Harbors Acts of August 26, 1937 (50 Stat. 844, 850), and October 17, 1940 (54 Stat. 1198, 1199). American River features were authorized under the act of October 14, 1949 (63 Stat. 852), and the Sacramento Valley Canals authorized under the act of September 26, 1950 (64 Stat. 1036). Trinity River division was added by finding of feasibility by Secretary of the Interior, approved by the President January 2, 1953 (H. Doc. 53, 83d Cong.), but in view of all the circumstances relating to the proposed Trinity River division, the Department does not propose to proceed with construction in the absence of new authorization, based on a restudy of the proposal which is now under way. Additional works for waterfowl management were authorized by the act of August 27, 1954 (Public Law 674, 83d Cong., 2d sess.).

LOCATION

The Central Valley consists of the Sacramento and San Joaquin River valleys in California. The valley is approximately 500 miles long and 100 miles wide, extending from Mount Shasta in the north to the Tehachapi Mountains on the south. Its watershed covers the area from the Sierra Nevada range to the delta outlet through San Francisco Bay.

DESCRIPTION

The plan of the project is to redistribute the water resources of the Central Valley since the northern portion, drained by the Sacramento River, contains approximately one-third of the land area and has two-thirds of the available water. Ths southern portion of the valley drained by the San Joaquin River has the reverse situation.

Shasta Dam provides water in storage in the north which under controlled releases flows down the Sacramento River. Near the confluence of the Sacramento and San Joaquin Rivers, the water is diverted through the Delta Cross Channel to the Tracy pumping plant. At the pumping plant the water is raised approximately 200 feet into the Delta-Mendota Canal in which it flows southerly a distance of 120 miles.

This new supply of water from the north permits, by exchange, such water as is available in the upper San Joaquin to be diverted southward. To achieve this, Friant Dam on the upper San Joaquin impounds the water in Millerton Lake, and via the Friant-Kern Canal this water is delivered 153 miles to the water-deficient areas of the southern extremes of the valley. The features of the American River—the major tributary of the Sacramento River—include Folsom Dam, under construction by the Corps of Engineers; Folsom and Nimbus powerplants; and necessary canals and transmission lines to be constructed by the Bureau. The Trinity River division is carried throughout this justification and in the attached tables in the same form used heretofore. As previously noted the entire proposal is under restudy by the Department. Its inclusion herein is therefore not to be construed as necessarily committing the Department in any way.

STATUS

The total estimated cost has been reduced from $764,764,280 to $750,499,607 (total estimated obligations $751,988,520). Change in estimate is primarily due as follows: Trinity River division up approximately $34 million due to estimate of larger reservoir. Friant-Kern distribution system up approximately $10 million due to addition of another distribution system. Increases offset by decreases as follows: Transmission line additions of $55 million deleted, and Folsom power facilities down $5 million which is revision of expenditures by Corps of Engineers.

On June 30, 1955, the project will be approximately 60 percent complete.

While all the initial features of the project have been in operation since 1951, a significant program of continuing construction is currently underway. Two items now account for more than half of the total program. The larger is the continuation of construction of the Folsom power facilities. This work will place the generators in Folsom and Nimbus powerplants in service by the close of 1955. Second in importance during the current year is the continuation of construction of the Central Valley project distribution systems including the initiation of construction on two new units. A third major item is the Sly Park Dam and conduit which by the close of fiscal year 1955 will be completed. Another major item in the current program includes the construction of Sacramento Canal unit. Other items in the current program include continuation of construction of Nimbus fish protection facilities and the continuation of studies on the Trinity River division.

REPAYMENT

At the start of fiscal year 1955, long-term water service contracts for Central Valley project water had been executed with 30 agencies, and contract negotiations were in various stages of completion with an additional 22 other districts. Amendatory contracts have been executed by five districts increasing the maximum contract liability under which the United States is constructing a distribution system. Two other amendatory contracts are in the process of negotiation.

Effective August 27, 1951, a wheeling contract between the Bureau and the Pacific Gas & Electric Co. covering electrical power transmission became operative. On that date the Bureau commenced service to the first preference customer and to Federal installations by the conveyance of Bureau power over the transmission lines of the private utility company. Currently 25 power sales contracts are in force—24 with preference customers, 1 with a private utility. It is anticipated that of the 2,700,000 kilowatt-hours estimated production in fiscal year 1956, approximately 85 percent will be required for project use and preference customers and the balance sold to a private utility.

Increased project revenues result as additional features reach the operating stage. It is anticipated that the collection from water sales in fiscal year 1956

will be $5,500,000, an increase of 29 percent over anticipated fiscal year 1955 water sales. It is further estimated that the total revenues from the sale of project water at the close of fiscal year 1955 (including prior years) will be over $20 million. Power revenues in fiscal year 1956 are estimated at over $11 million. At the end of fiscal year 1956 it is anticipated that the total cumulative power revenues will be in excess of $88,500,000. At the close of fiscal year 1956 the cumulative power and water revenues of the project will have exceeded $100 million.

AMOUNT TO BE REPAID AND REPAYMENT PERIOD

Construction costs ($282,237,000) allocated to commercial power will be repaid within 50 years of date individual facility becomes revenue producing. Payout is scheduled for completion by the year 2013.

Construction cost of irrigation distribution systems will be repaid within 40 years (plus 1- to 10-year development period) after completion of construction of individual systems.

Construction cost of irrigation water supply works will be paid in full by 2013.

Return of construction cost allocated to municipal water ($21,499,000) is scheduled for completion by 2013.

Repayment of costs allocated to irrigation and municipal water

Water service	$353,524,400
Power: Direct	63,961,600
Total	417,486,000

Repayment cost per acre

Federal investment, per acre	$369.00
To be repaid:	
From water service	312.00
From power revenue	57.00
Maximum annual water user charges: [1]	
Water service (includes O. and M. and construction) Friant-Kern and Madera Canals:	
Class 1 (firm supply), per acre-foot	3.50
Class 2, per acre-foot	1.50
Delta-Mendota and Contra Costa Canals, irrigation water, per acre-foot	3.50
Sly Park unit, irrigation water, Sacramento canals service area, per acre-foot [2]	2.50
Gross crop income per acre resulting from project irrigation (actual for calendar year 1953, includes nonproject water)	193.00

[1] In addition water users will bear costs of building and operating lateral distribution systems.
[2] Water users to operate and maintain Sly Park unit features. Reduced rates provided in early years.

HISTORY OF PROJECT DEVELOPMENT

Initial date

Planning: The Bureau has participated in studies for development in the Central Valley almost from the beginning of the Reclamation Service in 1902. The State water plan was issued by the State of California in 1930.

Advance planning: 1935.

Construction: 1935.

Date of functional completion of construction: Contra Costa distribution system, 1954; Delta-Mendota distribution system, 1954; Friant-Kern distribution system, 1957; Madera distribution system, 1955; Sacramento canals unit, after 1960; Trinity River division, after 1960.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1936, $6,900,000.

Construction costs

Original estimated cost	[1] $170,000,000
Allocation of cost	Unallocated
Present estimated cost	750,499,607
Amount to be allocated	[1] 755,427,000
Allocation of cost:	
Irrigation	395,987,000
Power	281,367,000
Flood control	47,561,000
Navigation	7,618,000
Municipal water	21,499,000
Fish and wildlife	1,395,000

[1] The total project cost, for allocation and repayment study, is $816,111,217 based on an estimate of $755,609,217 for works constructed by the Bureau and an estimate of $60,502,000 for Folsom Dam under construction by the Corps of Engineers. From this total, $60,606,657 for distribution systems covered by direct repayment contracts and $77,000 for the State of California have been excluded.

Schedule of development

	Fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (acres):				
Full	30,953	34,081	34,081	256,981
Supplemental	723,209	757,310	760,474	896,672
Total	754,162	791,391	794,555	1,153,653
Power (kilowatts)	454,000	521,500	629,500	862,500
Average power rates (mills per kilowatt-hour):				
Firm	5.2	4.8	4.9	4.2
Nonfirm	2.5	2.5	2.3	2.2

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$751,988,520
Total obligations to June 30, 1954		429,248,711
Allotment, fiscal year 1955	$20,960,338	
Prior year balance available	242,153	
Balance available in subsequent years	−329,000	
Total obligations, fiscal year 1955		20,873,491
Allotment, fiscal year 1956	$14,000,000	
Prior year balance available	529,000	
Total obligations, fiscal year 1956		14,329,000
Balance to complete		287,537,318

WORK PROPOSED, FISCAL YEAR 1956

Shasta Division

Shasta Dam and Reservoir ($29,000).—Final payment will be made for the West Side Road. Construction of the road will be completed in fiscal year 1955.

Keswick Dam and Reservoir.—No construction fund requirement for fiscal year 1956.

Shasta powerp'ant and switchyard ($1,231,205).—Includes $1 million for reworking of 2 generators. Any part of these funds not required will be reprogramed to Delta fish protection facilities and Friant-Kern distribution systems. In addition but separate from the generator work, central lubricating system and carrier current relay equipment will be installed by force account labor. Metering equipment will be installed in the metering station.

Keswick powerp'ant and switchyard ($14,795).—Carrier current relaying equipment will be installed. Repair of the turbine runners will be completed. Both items will be done by force account.

Shasta-Tracy East Side No. 3, 230 ki'ovo'ts.—This item is completed. Land and right-of-way costs were the last items completed in fiscal year 1955.

Shasta-Tracy West Side No. 1 and 2, 230 ki'ovo'ts.—This item is completed. No further fund requirement is programed.

General property.—This feature item is completed and no further fund requirement is programed.

Sacramento River Division

Sacramento Canal unit ($3,329,000).—Construction will continue on the first reach of the Corning Canal which by year-end will be approximately 67 percent complete. The program also provides for continuation of construction work and progress payments for the Corning Canal pumping plant. Surveys and design data will be started on the Tehama-Colusa Canal.

General property.—No funds are programed for this feature pending advancement of construction of principal features.

American River Division

Folsom Dam and Reservoir.—Facilities being constructed by Corps of Engineers.

Sly Park Dam and conduit ($21,422).—The program provides for only minor miscellaneous completion work preparatory to turning facilities at Sly Park over to the El Dorado irrigation district for operation.

Nimbus fish protection facilities ($344,671).—These funds will be required to complete this feature by providing for contract earnings on the fish hatchery and appurtenant works.

Folsom power facilities ($1,061,030).—Final payment will be made for right-of-way. The powerplant will be completed and the last 2 generators will be placed in service. Contract will be awarded for surfacing access roads and parking areas at Folsom and Nimbus and for miscellaneous work preparatory to turning the feature over to operation and maintenance.

Folsom transmission facilities ($110,238).—Specifications will be issued and contract awarded for construction of bus tie breakers for direct service to Sacramento Municipal Utility District. Shunt capacitors to meet estimated Sacramento Municipal Utility District contract requirements will also be installed. Specifications will be issued and contracts awarded for purchase of 230-kilovolt circuit breakers and disconnect switches for bus tie to Sacramento Municipal Utility District.

General property ($165,080).—Operational equipment and spare parts will be procured preparatory to turning the Folsom facilities over to operation and maintenance. Specifications will be issued for the construction of rain gage stations.

Trinity River division

Trinity River facilities.—The sum of $400,000 for preliminary investigations for fiscal year 1956 is included in the request for advance planning funds under general investigations. The proposed Trinity River division is now under restudy, and legislation authorizing the work is now before Congress. The cost as well as power output and additional water to be made available from the project will be determined by the result of this restudy and the action of Congress. As soon as possible thereafter, additional appropriations will be requested.

Project, general

Water rights ($348,000).—This program provides for the continuation of the activities concerning the riparian land delineation, and the summarization, compilation, and analysis of factual data on use of water from the Sacramento River, its tributaries, and the Sacramento-San Joaquin Delta. Activities will be continued, as required, in regards to the cooperation program entitled "Negotiations for Settlement of Water Diversions from the Sacramento River and the Sacramento-San Joaquin Delta with the Objective of Avoiding Litigation." The program also provides for negotiation and settlement of water right claims of landowners along the San Joaquin River between Friant and Gravelly Ford.

Central Valley waterfowl conservation ($70,000).—This is a new program item on the basis of Public Law 674, 83d Congress. These funds will be transferred to the United States Fish and Wildlife Service and California Department of Fish and Game. The funds will then be expended by these two agencies on a Federal and State reserve, respectively. Work will include digging of wells, purchase and installation of low-lift pumps, laying of concrete pipe and the flooding of certain sections in the reserves.

Preference customer metering facilities ($28,000).—Meters will be purchased and installed for Plumas-Sierra and Glenn-Colusa preference customers.

Central Valley radio network.—This feature is completed and no further funds are programed.

General property.—No funds are required under this program item.

Delta division

Tracy pumping plant and intake canal.—Final completion occurred in fiscal year 1955. No further fund requirements are programed.

Delta fish protection faciilities ($1,345,393).—All studies and experiments will be completed. Government-supplied materials for the permanent structure will be obtained and a construction contract will be awarded. At year end it is estimated the permanent structure will be 75 percent completed.

Contra Costa Canal ($10,000).—This amount is required to cover the cost transfer from the distribution system.

Contra Costa distribution system ($400,000).—This amount is programed for the construction of 5 additional laterals totaling 7 miles in length which will be constructed at the request of the county water district.

Delta Cross Channel ($73,807).—The program provides for the completion of the salinity studies and tidal and streamflow measurements.

Delta Mendota Canal ($200,800).—The program includes the installation of trash racks for turnouts and drainage siphons.

Plainview distribution system.—This feature item was completed in fiscal year 1955.

Tracy switchyard ($106,000).—Roads and surface drains in the switchyard will be constructed and certain structures stabilized.

Tracy-Contra Costa-Clayton-Ygnacio, 69-kilovolt transmission line and substation.—This feature is completed and no further funds are programed.

General property ($92,000).—Auto shop and vehicle storage space will be constructed at the Tracy switchyard.

Friant Division

Friant Dam and Reservoir.—Investigation of river outlet silting basin in October 1954 indicated that no remedial work would be necessary during fiscal year 1956. Accordingly, there is no fund requirement for the next immediate years.

Madera Canal ($277,371).—This amount is required to correct seepage and to complete graveling the surface of operating roads.

Friant-Kern Canal ($767,305).—The program of constructing and installing measuring devices and turnouts will be completed. Rehabilitation of concrete- and earth-lined sections of the canal as required for O. and M. status will be continued as will bridging of drain inlets.

Madera distribution system.—No program; all work was completed in fiscal year 1955.

Friant-Kern distribution system ($4,846,843).—The program provides for the cleanup and settlement of land and landrights in units 1 and 2 of Delano-Earlimart Irrigation District and completion of construction in unit 3 and Exeter Irrigation District units 2 and 3. Construction contracts are scheduled for award in the Southern San Joaquin Municipal Utility District, and the Stone-Corral and Shafter-Wasco Irrigation Districts. Award of Stone-Corral and Shafter-Wasco distributing system work are contingent upon authorizing actions by those districts.

General property ($25,481).—Two ditchrider houses will be constructed for Friant-Kern operating personnel.

Mr. NIELSEN. Central Valley, about the only item I can think of of particular interest is that we are now in a program of rewinding the Shasta generators. We have overloaded those Shasta generators over the past years to a very considerable profit to the United States.

But in the process we have necessarily had to get into more wear and tear on the machines.

We are rewinding the first of the generators there now. I will supply a statement for the record.

(The material referred to follows:)

Rehabilitation of Shasta Generators, Central Valley Project

The Shasta powerplant of the Central Valley project is located on the Sacramento River about 9 miles north of Redding, Calif. The powerplant contains 5 main generating units having a nameplate rating of 75,000 kilowatts and 2 station service units with a nameplate rating of 2,000 kilowatts, each unit being driven by a hydraulic turbine. Two of the main generators were installed in 1944. Two other units were originally installed for temporary use in the Grand Coulee powerplant in 1943 because of critical need for additional power for war industries in the Pacific Northwest. These generators were removed from the Grand Coulee powerplant following cessation of hostilities and replaced in service in the Shasta plant in 1948. The fifth and final unit was installed in 1949.

In order to help alleviate the severe power shortage which existed in central and northern California and in the Pacific Northwest during and following the war years, the Bureau operated its power facilities in such a manner as to make available the maximum possible generation of electrical energy.

To obtain a capacity of 180,000 kilowatts with a minimum head of 238 feet and as much firm output as feasible at the Shasta plant, the turbines were rated at a head of 330 feet. Increased turbine capacity is, therefore, available. In order to take advantage of the greater turbine capacities during normally better water conditions, the generators have often been loaded beyond their 75,000-kilowatt rating. This has resulted in economical and most advantageous use of facilities. Care has always been taken, however, not to operate the generators beyond the temperature rise specified by ASA standards.

It has always been recognized that operation above nameplate rating even though within specified temperature limits, shortens the useful life of the windings. Nevertheless, the economic gain from this operation is more than sufficient to offset any such shortening in life.

Routine testing to which the units are periodically subjected disclosed early in 1954 some indications of deterioration of the windings. This development was followed by failure of a coil in 1 generator during a general 10-year overhaul and test. Shortly thereafter another coil in a second generator failed under normal operating conditions. These occurrences and continued nondestructive periodical testing led to the conclusion that deterioration of winds had occurred to a general degree on all of the main units, although by no means are all of the coils of each generator equally affected.

In view of this situation, it is considered that future failure or failures of the units may occur at any time. Such a failure occurring during the heavy water release season could result in an extended and unscheduled outage of a generator causing high loss in revenue. Such loss in revenue might in fact amount to more than the cost of completely rehabilitating a generator.

While operation of the generators at loads above nameplate rated capacity may have resulted in reducing the useful life of the stator windings, the additional revenue received has been very profitable for the Central Valley project. From July 1945, until September 1954, the additional revenues derived from operating at capacity in excess of nameplate rating amounted to $4,715,385. This amount does not include additional revenues received from operation of two of the units above nameplate capacity while they were temporarily installed at the Grand Coulee powerplant during the war.

It is estimated that the total cost of rehabilitating one generator will not exceed $500,000. The net gain already realized by using the described operating procedure over the past 10 years, even if a complete rehabilitation program is followed, amounts to over $2,200,000.

Because of the deteriorated and weakened condition of the stator windings as now indicated by several coil failures and continuing testing, it has been determined that it would be in the best interest of the Government to rehabilitate the generators and to schedule this during periods of low water release from the dam, particularly during the nonirrigation season when the removal of a machine from service would entail minimum loss of revenue.

Thorough consideration of the problem indicates two possible methods of rehabilitating the generators which will assure reliable and long-life performance of the units with outputs corresponding to those under which they have been operating. One would involve soliciting a proposal calling for complete new stators. The other would be to solicit a proposal for the rewinding of the present stators. The specifications in either case would require the windings of each generator to be adequate for satisfactory continuous operation at 90,000 kilowatts, which is the output that the generators have been delivering in the past and that the turbines are normally capable of producing. Both specifications will be

advertised and after bids are received, they will be evaluated to determine which bid meeting specification requirements will provide the most satisfactory solution to the Government.

An item of $1 million has been included in the budget for the rehabilitation of generators for fiscal year 1956 and a similar amount will be required for the work in fiscal year 1957.

Chairman HAYDEN. You made a statement about the Santa Maria project.

Mr. NIELSEN. Yes, sir.

Chairman HAYDEN. I think that is a good place to stop.

We will recess the subcommittee now and reconvene at 2:30.

(Thereupon at 11:50 a. m., the subcommittee was recessed, to reconvene at 2:30 p. m., same day).

AFTERNOON SESSION

BUREAU OF RECLAMATION

STATEMENTS OF E. G. NIELSEN, ASSISTANT COMMISSIONER; S. W. CROSTHWAIT, ASSISTANT COMMISSIONER; N. B. BENNETT, JR., CHIEF, PROJECT DEVELOPMENT DIVISION; F. E. DOMINY, CHIEF, IRRIGATION DIVISION; D. S. CAMPBELL, CHIEF, POWER DIVISION; G. E. TOMLINSON, ASSISTANT CHIEF, PROJECT DEVELOPMENT DIVISION; A. R. GOLZÉ, CHIEF, PROGRAM COORDINATION AND FINANCE DIVISION, AND D. S. MITCHELL, CHIEF, LAND AND WATER BRANCH, IRRIGATION DIVISION, BUREAU OF RECLAMATION

SOLANO PROJECT, CALIFORNIA

Chairman HAYDEN. The committee will come to order. Let us go down the line to whatever comment you have to make about the Solano project in California.

PROJECT DATA

AUTHORIZATION

The project was authorized by the Secretary of the Interior, on November 11, 1948, by approval of a project feasibility report under provisions of section 9 (a) of the Reclamation Project Act of 1939 (H. Doc. 65, 81st Cong.).

LOCATION

The project is located largely in Solano County, Calif., which county adjoins the northeast extremity of San Francisco Bay. A part of the Monticello Reservoir area extends northwest into a portion of Napa County, Calif.

DESCRIPTION

The project provides for a storage reservoir of approximately 1,600,000 acre-feet to be created by the construction of a concrete arch dam with a crest length of 1,017 feet and 276 feet high, located on Putah Creek below Monticello; a small concrete and earthfill diversion dam downstream; a main canal 38 miles in length with a small terminal reservoir, and the necessary wasteways, laterals, and drainage works.

STATUS

As of June 30, 1954, the contract for construction of Monticello Dam was well underway. Relocation of a 3-mile portion of State Highway Route 28 was nearing completion. Field design data on 14 miles of lined canal has been completed.

Bids were opened on July 7, 1954, and contract awarded for construction of the next section of highway, a 10-mile section. Surveys and investigations for the diversion dam have continued.

REPAYMENT

Negotiations are in process with the Solano County Flood Control and Water Conservation District. Execution of the water-service contract by the district is scheduled for January 1955. A distribution system repayment contract is scheduled for execution by the Solano Irrigation District in March 1956.

The proposed 40-year water service contract, is scheduled for execution by January 1955. According to the terms of the contract, the Solano County Flood Control and Water Conservation District has the opportunity of taking the full water supply of the project, and to contract with irrigation and municipal organizations for delivery of project water. Maximum water rates are $15 per acre-foot for municipal and industrial water and $2.65 for irrigation water service. These water rates are calculated to return the full reimbursable cost of water supply works of the Solano project, plus interest at 2.6 percent on the allocation to municipal water cost within the 50-year period contemplated in the authorizing document. The countrywide district will operate the Putah South Canal.

A separate repayment contract will be required with the Solano Irrigation District for irrigation distribution system and drainage works constructed by the Government. Project construction cost estimates include approximately $15 million for the distribution system and related drainage system.

Repayment of costs allocated to irrigation

Irrigation water users by water rates	$18,731,700
Irrigation water users for distribution system	15,164,000
Municipal water users	9,430,300
Total	43,326,000

Repayment costs per acre

Federal investment, per acre	$451.00
To be repaid—	
From water users	362.00
From municipal water	89.00
Payment capacity, per acre	44.00
Annual water user charges:	
Distribution systems:	
Construction	4.31
Operation and maintenance	4.42
Water service charge	6.52
Total	15.25

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1941; advanced planning, 1949; construction, 1954.

Date of functional completion of construction: Fiscal year 1959.

Fiscal year and amount of initial allotment of appropriation for construction: Fiscal year 1953, $3 million.

Construction costs

Original estimated cost	$45,577,000
Allocation of cost:	
Irrigation	38,599,000
Flood control	1,930,000
Domestic and industrial water	5,048,000
Present estimated cost	47,111,000
Allocation of cost:	
Irrigation	43,326,000
Municipal and industrial water	2,653,000
Flood control	1,132,000

Schedule of development

	Fiscal year 1954	Fiscal year 1955	Ultimate
Irrigation (acres):			
Full			$71,881
Supplemental			24,187
Total			96,068

Estimate for construction and rehabilitation

Estimated total obligations		$46,474,396
Total obligations to June 30, 1954		2,822,973
Allotment, fiscal year 1955	$6,975,000	
Prior year balance available	25,642	
Total obligations, fiscal year 1955		7,000,642
Allotment, fiscal year 1956	13,000,000	
Total obligations, fiscal year 1956		13,000,000
Balance to complete		23,650,781

Work proposed, fiscal year 1956

Monticello Dam and facilities ($11,003,948).—The program provides for contract payments to virtually complete the dam, relocation of Napa County roads, continuation of reservoir clearing, the completion of acquisition of land and land rights, the completion of all highway relocation (approximately 16½ miles in length); relocation of Monticello Cemetery.

Putah Diversion Dam and South Canal ($2,093,120).—All necessary land and right-of-way for the dam will be acquired, procurement of Government supplied materials will commence and construction will begin on the dam. Approximately 80 percent of the right-of-way for the canal will be acquired; materials for the first section of the canal will be purchased and by year end the first section will be approximately 70 percent complete. Specifications will also be issued for the next two sections of the canal. This activity should proceed as scheduled to coordinate the construction of the diversion dam and canal with the availability of water.

Distribution systems.—No work has been done on this feature except under project investigations for the final revised definite plan report and no work is scheduled for fiscal year 1956.

Drainage system.—No detailed layout of a drainage system has been made. The drainage work required will be determined from experience obtained under project operation. No work is scheduled on this feature during fiscal year 1956.

Mr. NIELSEN. Do you want a comment on Solano?

Chairman HAYDEN. I remember this last year. There was difficulty about the acquisition of land in the reservoir site. How are you getting along on that?

LAND PURCHASE PROGRAM

Mr. GOLZÉ. Mr. Chairman, the land purchase program is not moving as rapidly as the Bureau originally anticipated. There is some difficulty in acquiring land either by negotiations or condemnation too far in advance of actually flooding out the rights-of-way for the reservoir. The Bureau has the money as appropriated last year, and is applying it as the opportunity permits. The program will probably carry over at least a million dollars into fiscal year 1956 for the continuation of the purchase program.

Chairman HAYDEN. The money is available. I can understand, of course, a man that is going to have his farm flooded does not

want to move out until he has to. But, on the other hand, if he knows he has to go, it seems to me he would be willing to enter into some kind of agreement and definitely have an idea about that. If there was some delay, that would be to his profit.

Mr. GOLZÉ. Yes, sir; it is working out both ways. Where the individual wants to go, we have the money and can close the deal. He gets the funds needed to make his purchase elsewhere and we get the land. But in cases where the individual wants to stay on, there is no reasonable way in which the matter can be expedited until the reservoir construction is further ahead. We have a statement giving the present status.

(The information referred to follows:)

LAND ACQUISITION PROGRAM, MONTICELLO RESERVOIR, SOLANO PROJECT

The land acquisition program for the Monticello Dam and Reservoir encompasses a total area of 28,000 acres, consisting of 144 parcels having a total appraised valuation of $5,700,000. Fee title will be acquired in all instances; however, grazing rights will be retained by the vendors in those areas where the lands will be flooded only a small percentage of the time.

To date 38 parcels having an area of 2,248 acres have been acquired at a cost of $415,080. Six of these parcels were acquired by condemnation and the balance of 32 parcels were acquired by negotiation. The balance of the acquisition program is scheduled for completion in fiscal year 1956 and early in fiscal year 1957. Property having an appraised valuation of $69,438 was acquired prior to fiscal year 1955.

An amount of $2,400,000 was scheduled for land acquisition in fiscal year 1955. To date $345,642 of this amount has been expended leaving a balance of approximately $2,055,000. However, negotiations now in process and which may be signed by the landowners within this fiscal year would reduce this balance by $1,300,000, leaving a balance of $755,000 to be carried over into fiscal year 1956.

The land acquisition program for the Solano project has been proceeding rather slowly due to the reluctance of the landowners to sign the necessary contracts. Our objective has been to avoid condemnation proceedings wherever possible and to negotiate with the landowners at the appraised valuations.

COLORADO-BIG THOMPSON PROJECT, COLORADO

PROJECT DATA

AUTHORIZATION

The Colorado-Big Thompson project was authorized by a finding of feasibility by the Secretary of the Interior, dated December 20, 1937, approved by the President on December 21, 1937.

LOCATION

The project is located in north-central Colorado, extending eastward from the headwaters of the Colorado River in the general vicinity of Grand Lake, Granby, and Kremmling across the Continental Divide to the headwaters of the Big Thompson River near Estes Park and eastward to farmlands in northeastern Colorado.

DESCRIPTION

The primary purpose of the project is to provide a supplemental water supply for the irrigation of 615,000 acres of irrigated land on the eastern slope of the Rockies in northeastern Colorado. Surplus water of the Colorado River flows by gravity through Grand Lake and then by way of the Alva B. Adams tunnel through the Continental Divide to the eastern slope.

The powerplants of the project with installed capacity of 183,950 kilowatts are connected by a transmission system, interconnected with power systems of the North Platte, Kendrick, Riverton, Shoshone, and Missouri River Basin projects, in addition to other private and publicly owned power systems.

STATUS

Construction began in 1938. As of June 30, 1955, the project will be approximately 97 percent complete. At present work is underway on construction of the Boulder Creek supply canal, and completion of the Willow Creek feeder canal system, Estes Park-Foothills power system, Carter Lake dams and Reservoir, St. Vrain supply canal, Horsetooth dams and Reservoir, and substation additions. The latter features have been placed in operation. Bids have been opened for the initial reach of the South Platte supply canal and work will be well along by early spring. Work on the last powerplant—the Big Thompson plant with a 4,500-kilowatt capacity—has not been started.

Studies previously underway for the extension of the project collection and storage facilities to meet the total water diversion contemplated in Senate Document No. 80, though interrupted in fiscal year 1955, will be continued in fiscal year 1956.

REPAYMENT

Status of repayment contract negotiations: 40-year repayment contracts in the amount of $26,031,000 have been entered into with the Northern Colorado Water Conservancy District. Contract also entered into with conservcany district for rental of irrigation water prior to project completion (estimated to return additional $3 million to apply on construction cost).

Amount to be repaid and repayment period

	Amount	Repayment period, regular	Total
Irrigation	$29,031,000	1951–1997	47 years.
Power	131,324,000	1943–2041	(1)

[1] Project construction costs allocated to commercial power will be repaid with interest within 50 years from the date individual facility becomes revenue producing.

Repayment of costs allocated to irrigation

Water users	[1] $29,031,000
Power	70,619,000
Total	99,650,000

[1] Includes $3 million estimated net revenues from irrigation water rentals prior to completion of project construction and commencement of regular repayment period.

Repayment costs per acre: Supplemental water supply project. Each area only participates in costs to extent water allocations are made.

Average Federal investment per acre of area that can be served	$162
To be repaid—	
From irrigators	47
From power revenue	115
Annual water user charges per acre-foot: [1]	
Construction	$1.50
Operation and maintenance	.47
Total	1.97
Gross crop income per acre resulting from project irrigation (actual for calendar year 1953)	$96

[1] 1 acre-foot defined in allotment contracts as 1/410,000 of annual supply. Additional revenue is gained for the repayment agent by an ad valorem tax on all property within conservancy district.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1935; advanced planning, 1937; construction, 1938.

Date of functional completion of construction: Fiscal year 1959.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1938, $2,900,000.

Construction costs

Original estimated cost	$43,883,000
Allocation of cost:	
Irrigation	24,800,000
Power	19,083,000
Present estimated cost	159,461,000
Allocation of cost:	
Irrigation	99,650,000
Power	58,448,000
Power cost incurred for other projects	1,363,000

The total estimated cost of the project has been decreased from $161,098,537 to $159,461,000 (anticipated total obligations, $159,692,279). The decrease in the total estimated cost has been caused by elimination of previously proposed future project additions which now appear to be too indefinite for retention in the estimate, the adjustment of estimates of completed features to agree with actual expenditures, and the increased accuracy of estimates of remaining work.

Schedule of development

	Through, fiscal year 1954	Through, fiscal year 1955	Through, fiscal year 1956	Ultimate
Irrigation system, supplemental	410,000	560,000	615,000	615,000
Power (kilowatts)	179,450	179,450	179,450	183,950
Power rates (mills per kilowatt-hour): Firm at 50 percent load factor	7.1	7.1	7.1	5.4

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations	$159,692,279
Total obligations to June 30, 1954	154,683,637
Allotment, fiscal year 1955	1,130,000
Prior year balance available	120,000
Total obligations, fiscal year 1955	1,250,000
Allotments, fiscal year 1956	2,100,000
Total obligations, fiscal year 1956	2,100,000
Balance to complete	1,658,642

Work proposed, fiscal year 1956

Storage facilities.—Facilities completed, no fiscal year 1956 program.

Carriage facilities.—Facilities completed, no fiscal year 1956 program.

Transmission facilities.—Facilities completed, no fiscal year 1956 program.

Green Mountain Dam, powerplant, and switchyard ($31,664).—This amount will be used for final payment on the transformer and contract costs of installation.

Willow Creek feeder canal system ($40,000).—This amount will be used to correct erosion along the canal.

Estes aqueduct, power system, and Olympus Dam ($39,000).—This amount is required to make payments on equipment for the Estes Park substation addition and contract payments for installation.

Estes Park-Foothills power system ($140,000).—This amount is required for construction of the Valmont bay of Flatiron switchyard. Metering equipment will be ordered for the Valmont bay of Flatiron switchyard upon completion of negotiations with the Public Service Co. of Colorado for interconnection between Flatiron switchyard and the Public Service system at the Valmont steam plant.

Big Thompson powerplant, switchyard, and transmission line.—Work on this feature has been deferred.

Boulder Creek supply canal.—No work is scheduled for this feature during fiscal year 1956.

South Platte supply canal ($1,244,129).—This amount will be used to continue construction and pay contract earnings for completion of the canal for delivery of water in 1956.

Project substations—multiple line use.—No work is scheduled on features included in this item in fiscal year 1956.

Green Mountain-Dillon 115-kilovolt transmission line and substation.—No work is scheduled for this feature during fiscal year 1956.

Green Mountain-Oak Creek 115-kilovolt transmission line and substation ($68,000).—These funds are required for payment for equipment and installation in the Oak Creek substation to serve additional load requirements of the Yampa Valley area including the new Craig metering station to serve the White River REA.

Estes-Granby pumping plant—Green Mountain 69-kilovolt transmission lines and substations ($80,000).—These funds are required to award a contract for increase of the transformer capacity of Granby substation from 600 kilovolt-amperes to 5,000 kilovolt-amperes and to pay for the 5,000-kilovolt-ampere transformer and associated equipment.

Flatiron-Greeley-Beaver Creek-Sterling 115-kilovolt transmission lines and substations ($144,000).—These funds are required to complete procurement of the 6,000-kilovolt-ampere transformer bank and to contract for installation of the transformer bank and associated equipment for Fort Morgan substation additions.

Flatiron-Fort Collins-Cheyenne tap 115-kilovolt transmission line and substations.—Nor work is scheduled for this feature during fiscal year 1956.

Permanent improvements ($300,000).—No work is scheduled for this feature during fiscal year 1956. The $300,000 represents a transfer of service facility equipment to "General plant" for "Operation and maintenance" use.

Chairman HAYDEN. The next project is the Colorado-Big Thompson. I notice you are getting more money this year than you had last year. The total cost is $159 million. You have had up to date, $155 million. You are asking for $2,100,000. How near completion are you?

Mr. NIELSEN. We are very near completion this year.

Chairman HAYDEN. What do you have left to do?

Mr. NIELSEN. Except for the Big Thompson powerplant, the completion of some final canal system work remains to be done. As of June 30 next, we estimate we will be 97 percent complete.

Chairman HAYDEN. Is there not another powerplant contemplated in there?

Mr. NIELSEN. There are several plants now operating, but there is the Big Thompson powerplant still to be built.

Chairman HAYDEN. Did you ask the Bureau of the Budget for it last year?

Mr. NIELSEN. Yes, sir; we did.

Chairman HAYDEN. And it was not allowed by the Bureau of the Budget?

Mr. NIELSEN. No, sir.

Chairman HAYDEN. Then you will be asking for that next year?

Mr. NIELSEN. At some time, sir. We can supply a statement for the record.

(The information referred to follows:)

BIG THOMPSON POWERPLANT, COLORADO-BIG THOMPSON PROJECT

The Big Thompson powerplant will be located near the mouth of the Big Thompson Canyon in Colorado. It is considered an essential feature of the present plan of development for the Colorado-Big Thompson project as based on the original plan outlined in Senate Document 80, 75th Congress. This will be a single-unit plant with an installed capacity of 4,500 kilowatts and a normal operating head of approximately 180 feet.

This plant will utilize water released from the Horsetooth Feeder Canal to the Big Thompson River and any water which may be picked up out of the Big Thompson River for power use at the Big Thompson heading of the Horsetooth Feeder Canal. This water would be beneficially used by passing through the plant, generating approximately 17,400,000 kilowatt-hours of energy annually. Since the system is limited by the available energy, this energy production is most desirable.

This plant is included in the Colorado-Big Thompson project power system average rate and repayment study which presents the financial analysis for average rate determination and repayment ability of the project. Using the Missouri River Basin project average firm energy rate of 5.5 mills per kilowatt-hour, a financial payout was made which showed that the annual revenues of $88,550 are sufficient to repay the annual requirements of $83,600, which is necessary to amortize the plant investment, and pay the costs of operation, maintenance, and replacement.

Annual requirements:	
Operation and maintenance	$16,500
Replacement	9,700
Amortization 3 percent, 50 years	57,400
Total	83,600
Annual revenues	88,550

MICHAUD FLATS PROJECT, IDAHO

Project Data

AUTHORIZATION

Authorized for construction under Public Law 741, 83d Congress, 2d session.

LOCATION

In Power County in Southeastern Idaho, south of the American Falls Reservoir and Snake River. The project lands extend in a narrow strip southwest and northeast of the town of American Falls and occupy valley and benchlands between the Snake River and the foothills of the Deep Creek Mountains.

DESCRIPTION

Primary purpose of the project is to provide a water supply to 11,035 acres of irrigable land. Of this area, 7,077 acres would be served directly by pumping from the primary water supply in American Falls Reservoir, and 3,958 acres by pumping, from ground water wells, an amount not exceeding the return flow resulting from application of the primary supply. Distribution would be through canals for gravity application to about 9,500 acres and through pipelines for sprinkler application to about 1,500 acres which can be irrigated only tby his method.

STATUS

No construction work has been performed. A project planning report was prepared as the basis for authorization. The definite plan report will be completed by the end of the current fiscal year.

REPAYMENT

The Falls Irrigation District, formed in 1949 by the landowners in the project area, will be the repayment contract organization.

Execution of the repayment contract is expected to be accomplished during the first half of the fiscal year 1956 prior to award of the construction contracts. Construction costs of the project works described above, plus allocation of costs from storage reservoirs, are estimated at $4,600,000. Authorizing legislation for the projects provides that net power revenues from Palisades project shall, after payout of Palisades costs, be applied in proportion to the total construction costs of the Michaud Flats project and the Michaud division of the Fort Hall Indian Reservation. Since the amounts authorized to be appropriated by the Congress are the same for each development one-half of Palisades net power revenues would be available for application to Michaud Flats project in the 48th year of the Michaud Flats project repayment period, an overall repayment period of about 52 years is indicated for the latter project.

Amount to be repaid and repayment period

	Amount	Repayment period		
		Regular	Development	Total
		Years	*Years*	*Years*
Irrigation	$2,984,000	52	10	62
Palisades power revenues	1,616,000	4	0	4

Repayment of costs allocated to irrigation

Water users	$2,984,000
Palisades power revenues	1,616,000
Total	4,600,000

Repayment costs per acre

Federal investment per acre	[1] $417.00
To be repaid—	
From water users	270.00
From power revenues	147.00
Annual water users charges:	
Construction	[1] 5.24
Operation and maintenance	6.79
Total	[1] 12.03

[1] Includes Palisades and American Falls Reservoir costs.

Gross crop income per acre resulting from project irrigation: $80 estimated.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1926; authorization, 1954; advance planning, fiscal year 1955.

Date of functional completion of construction: fiscal year 1958.

Fiscal year and amount of initial allotment of appropriation to Bureau for construction: Fiscal year 1956, $520,000.

Construction costs

Original estimated cost	[1] $4,600,000
Allocation of cost: Irrigation	[1] 4,600,000
Present estimated cost	4,600,000
Allocation of cost: Irrigation	[1] 4,600,000

Schedule of development

Irrigation system: Irrigation acreage for service, full:	
Through fiscal year 1954	------
Fiscal year 1955	------
Fiscal year 1956	------
Ultimate	11,035

[1] Includes $474,500 of storage costs from Palisades and American Falls Reservoir and $60,700 of settler assistance costs.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$3,955,712
Total obligations to June 30, 1954		----------
Total obligations, fiscal year 1955		----------
Allotment, fiscal year 1956	$520,000	
Total obligations, fiscal year 1956		520,000
Balance to complete		3,435,712

Work proposed, fiscal year 1956.

American Falls pumping plant ($80,000).—Preconstruction fieldwork will be initiated and completed during the year in order that specifications can be prepared and issued in time to permit the award of contracts at the beginning of the following fiscal year. The pumping plant is the key feature of the Michaud Flats project and is scheduled to be completed before the 1958 irrigation season.

Deep wells for canals and laterals ($100,000).—Fieldwork will be completed, specifications issued, and a contract awarded for drilling 15 deep wells. Progress payments will be made as required. These wells are scheduled to be completed in time for use during the 1958 season.

Deep wells for sprinklers ($68,000).—Fieldwork will be completed, specifications issued, and a contract awarded for drilling 10 deep wells. Progress payments will be made as required. These wells are scheduled to be completed in time for use during the 1958 season.

Main Canal West ($27,000).—Preconstruction work will be carried out and a construction contract awarded in sufficient time to permit completion concurrently with the pumping plant.

Main Canal East ($87,000).—Preconstruction work will be carried out and a construction contract awarded in sufficient time to permit completion concurrently with the pumping plant.

Laterals from Main Canal West ($22,000).—Surveys will be undertaken and specifications issued in order that construction may be started early in the following fiscal year, leading to completion for joint use with the canal system.

Laterals from Main Canal East ($24,000).—Preconstruction work will be completed in order that a contract may be awarded in the following fiscal year and east laterals placed in service jointly with the Main Canal East.

Lateral main lines for sprinklers ($70,000).—Investigations will be completed and a contract awarded for these laterals to permit construction to proceed concurrently with the wells being drilled for the sprinkler system.

Drains.—Work on these facilities is dependent upon the determination of the project drainage requirements.

Distribution lines (electric).—No work will be scheduled on the distribution lines pending the outcome of negotiations for wheeling arrangements.

General property ($20,000).—A garage, warehouse, and shops will be constructed in the town of American Falls for use by the construction forces in carrying out construction operations.

Chairman HAYDEN. Here is a brand new project, the Michaud Flats project in Idaho. Tell us about that.

Mr. NIELSEN. That is a project that will furnish a water supply for about 11,000 acres of irrigable land, about 7,100 of which will be developed by pumping directly from American Falls Reservoir and about 4,000 by pumping from ground water wells to intercept return water which comes off the other land. That lies mostly south of American Falls.

Chairman HAYDEN. At what elevation above sea level? That amount, incidentally, is $520,000.

Mr. NIELSEN. I would say roughly about 4,000 feet.

Chairman HAYDEN. It is not high enough to be cold all the year around. They grow crops there, do they?

Mr. NIELSEN. Yes, sir.

Chairman HAYDEN. How far will you get with this $520,000 on a $4 million project?

Mr. NIELSEN. It will be sufficient to get the project started.

Senator DWORSHAK. When will construction actually start? You still have some engineering work to do?

Mr. NIELSEN. Yes, sir; we have.

Senator DWORSHAK. How long will it take you to complete that?

Mr. NIELSEN. I would judge along about the first of the calendar year we could begin to let some contracts and get some specifications out.

Senator DWORSHAK. How about the Indian land section of the Michaud project?

Mr. NIELSEN. The Bureau of Indian Affairs handles that.

Senator DWORSHAK. You do not have anything to do with that?

Mr. NIELSEN. No, sir.

Senator DWORSHAK. You did not do any of the engineering work on the surveys?

Mr. NIELSEN. I suppose there is some degree of coordination work there.

Senator DWORSHAK. But anything that is done from this point on must be done by the Indian Bureau?

Mr. NIELSEN. Generally, yes. We always work with them.

Senator DWORSHAK. You testified a year ago, when the authorization was put through the last session, did you not, that is, the Bureau?

Mr. GOLZÉ. The Bureau may have, sir.

Senator DWORSHAK. You do not recall that?

Mr. GOLZÉ. No, sir; I do not.

Senator DWORSHAK. You do not know whether they would be ready in 6 months or a year to undertake construction of the other part of the project?

Mr. GOLZÉ. No, sir.

Chairman HAYDEN. How is the land area divided between the Indian land and public land?

Mr. NIELSEN. I do not know the acreage, no.

Mr. CAMPBELL. In answer to Senator Dworshak's question, there will not be pumping until Palisades comes on the line late in 1956.

MINIDOKA PROJECT, NORTH SIDE PUMPING DIVISION, IDAHO

PROJECT DATA FOR CONSTRUCTION

AUTHORIZATION

The north side pumping division of the Minidoka project was authorized by the act of September 30, 1950 (64 Stat. 1083).

LOCATION

The north side pumping division is located in south-central Idaho, north of Rupert.

DESCRIPTION

The division consists of 77,650 acres of irrigable public withdrawn land, of which 64,000 acres are to be irrigated by pumping from ground water and 13,650 acres by pumping from Snake River. A portion of the presently reserved storage space in American Falls Reservoir, augmented by storage from the Palisades project, will be used to supply irrigation water to the 13,650 acres.

STATUS

By June 30, 1954, 16 irrigation wells and 13 observation wells were in operation serving 7,334 acres and the division was more than 20 percent complete. Power to operate these wells is being secured from the Boise project—Minidoka seventh unit power system and by purchases from the Idaho Power Co. All Government-furnished power is wheeled over the transmission facilities of the Idaho Power Co. Twenty-two wells with lateral systems were nearing completion and drilling had been initiated on the 30 wells of group 3 and the 32 wells of group 4. During fiscal year 1955 drilling of groups 3 and 4 wells will be completed. Group 3 wells will be equipped and the laterals for the latter group will be constructed. Construction will be initiated on the pumping plant and related distribution facilities of unit A and all permanent operation and maintenance equipment and buildings.

REPAYMENT

The cost of the irrigation facilities of the north side pumping division will be repaid by water users. Most of the land of the north side pumping division is in public ownership. After a reasonable portion of land passes to private ownership, a water-user organization will be formed and repayment contract will be negotiated prior to the close of the development period as provided by the Reclamation Project Act of 1939.

Successful applicants for public land farm units have been required to sign a form of contract entitled "Recordable Interim Repayment Contract" in which each agrees to cooperate in the organization of an irrigation district and in the negotiation of a repayment contract between that district and the United States. Prior to the organization of the district, water is being made available at rates announced by the United States. Payment is made in advance of the delivery of water.

Amount to be repaid and repayment period

Irrigation:	
Amount	[1] $10,304,060
Repayment period:	Years
Regular	50
Development	10
Total	60

[1] Exclusive of transmission facilities which may not be required as a result of current wheeling negotiations

Repayment of costs allocated to irrigation

Repaid by water users	$10,304,060
Repayment costs per acre:	
Federal investment per acre	133
To be repaid—	
From water users	133
From power revenue	0
Annual water charges:	
Construction	2.65
Operation and maintenance	8.20
Total	10.85

Gross crop income per acre resulting from project irrigation (actual for 1953), $149.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1904; advance planning, 1950; construction, 1952.

Date of functional completion of construction: Fiscal year 1958.

Fiscal year and amount of initial allotment of appropriation for construction: Fiscal year 1953, $150,000.

Cost

Construction cost	$9,759,000
Transitional development and settler assistance	755,000
Storage costs	881,000
Original and present estimated cost, total	11,395,000
Allocation of cost, irrigation	11,395,000

Schedule of development

Irrigation system: Irrigable acreage for service, full water supply:	
Through fiscal year 1954	7,334
Fiscal year 1955	16,118
Fiscal year 1956	26,766
Ultimate	77,650

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$10,514,000
Total obligations to June 30, 1954		2,146,160
Allotment, fiscal year 1955	$1,900,000	
Prior year balance available	25,000	
Total obligations, fiscal year 1955		1,925,000
Allotment, fiscal year 1956	$2,200,000	
Total obligations, fiscal year 1956		2,200,000
Balance to complete		4,242,740

Work proposed, fiscal year 1956

Main pumping plant, unit A ($373,000).—Construction will continue and progress payments will be made under a prime contract awarded in fiscal year 1955 for the erection of the pumphouse, the penstock and the installation of the pumps and motors under contracts now in effect and for contracts to be awarded

Canal, unit A ($5,000).—Construction of the main canal started in fiscal year 1955 will be completed in fiscal year 1956 in time to convey water from the newly completed pumping plant to unit lateral systems.

Laterals, unit A ($255,000).—These funds will provide for progress payments on a contract to be awarded early in fiscal year 1956 for the construction of the lateral facilities for 13,650 acres of land. Completion of the lateral system will be geared with completion of pumping plant and canal.

Drains, unit A.—Work on the drains will be initiated after the unit facilities are placed in operation.

Relift pumping substations, unit A ($20,000).—These funds will provide for progress payments and associated costs on a contract to be awarded early in fiscal year 1956 for the construction of the unit A relift pumping plant substations. These substations are required for step-down power to the relift pump plants to be constructed as part of the lateral system.

Deep wells, unit B ($675,770).—The well program for fiscal year 1956 includes the installation of the pumps, motor and controls for group 3 (30 wells), complete the drilling and purchase the pumps, motors and controls for group 4 (32 wells), continue the drilling on group 7 (28 wells) and start drilling on groups 5 and 6 (47 wells). Work on the unit B facilities is geared to completion by the end of fiscal year 1957.

Laterals, unit B ($253,160).—The fiscal year 1956 program will complete the replacement of the temporary wooden structures on group 1 with concrete and will provide progress payments for a contract to be awarded early in the fiscal year for the construction of the group 4 laterals. The construction of laterals is scheduled to provide conveyance of water to unit lands as the deep wells are completed.

Drains, unit B ($40,000).—Drainage work consisting of drainage wells and open channels will be continued during fiscal year 1956 to prevent loss of land now being irrigated.

Pumping substations, unit B ($233,000).—The fiscal year 1956 includes the completion of the pumping substations for group 3 wells, the purchase of transformers and accessory electrical equipment for group 4 wells, and progress payments on the construction of the group 4 pumping substations.

Transmission lines.—These lines are to be constructed only if satisfactory wheeling arrangements cannot be made to provide power for the division deep wells and pumping plants.

General property ($171,750).—The program for fiscal year 1956 provides for the construction of 3 more ditchrider houses, 2 pumping plant operator houses, truck, car and equipment storage sheds. The program of operation and maintenance equipment purchases will be continued during fiscal year 1956. These facilities are required for operation of the irrigation works as completed.

Chairman HAYDEN. Is there anything new on the Minidoka?

Mr. NIELSEN. I don't think of anything, sir.

Senator DWORSHAK. You had a big drawing out there last Friday. I have not heard about the details. How many applicants did you have for the units?

Mr. NIELSEN. Can you answer that, Mr. Mitchell?

Senator DWORSHAK. You had originally 100 units, but about 35 of those or so went to GI's located from other Government projects, as I recall, leaving about 65 units available.

Mr. MITCHELL. That is right, about 65 available to new settlers.

Senator DWORSHAK. How many applications did you have?

Mr. MITCHELL. I will see if I have that figure.

Senator DWORSHAK. Well, you can supply that for the record.

(The information referred to follows:)

PUBLIC NOTICE NO. 46, MINIDOKA PROJECT, IDAHO

Public Notice No. 46, issued February 18, 1955, announced the availability of 94 farm units on the Minidoka project in Idaho for entry under reclamation and homestead laws. During the 90-day filing period provided therein 5,780 applications were received. Of this total, 5,670 applications were filed by individuals claiming veterans' preference and 110 by nonveterans. Of the 94 units, 28 went to settlers transferring from other projects.

VETERAN RESETTLEMENT

Chairman HAYDEN. I have had some complaint in Arizona about a matter that Senator Dworshak mentioned. We have this situation where you have had settlers on certain projects where you had some bad lands. They have preference on any new lands you open. There is a feeling that some of them are getting a little bit the best of it, having two chances to get a farm. Under this arrangement the people of Arizona have very little chance to draw anything. What are you doing to equalize things a little bit?

Mr. NIELSEN. We are bound, of course, by the basic legislation. We have not much option in the matter.

Chairman HAYDEN. You admit, then, that in allowing a veteran to settle on some other project, you let him have a tract of land that he cannot support himself and his family on, and, therefore, he should be moved to another one?

Mr. NIELSEN. That is the effect of what Congress has told us.

Senator DWORSHAK. Who makes the determination as to the inadequacies of the land which the veteran is already farming?

Mr. NIELSEN. The Bureau of Reclamation.

Senator DWORSHAK. You can use a lot of discretionary power and not permit everybody to move into a new project, just because they feel they have a secondary farm now on some other project.

Mr. NIELSEN. You would have us extend our judgment to the desirability of carrying out the intent of Congress. You would have us examine objectively and determine whether or not the man should be resettled, and that is what we are trying to do.

Senator DWORSHAK. I certainly would. But if the Bureau has made a half dozen mistakes in the past, and comes up with the potential resettlement of 500 GI's, what will that do with the future development of projects like the Minidoka North Side?

Mr. NIELSEN. Of course we will still have veterans on those new farms.

Chairman HAYDEN. That is the next thing I was going to ask you. If a man abandons a farm on one project and moves to another, what do you do with that land?

Mr. NIELSEN. So far as possible, reparcel it out to the people that remain there.

Chairman HAYDEN. That is to say the difficulty in some places was that you did not give the man enough land in the first place?

Mr. NIELSEN. Enough irrigable acreage or enough acreage of good quality.

Chairman HAYDEN. I think it was a mistake to make the farm units too small.

Senator DWORSHAK. Sometimes the expected water supply was not in accord with the engineering data. That is true, too, is it not?

SOIL AND DRAINAGE SURVEYS

Chairman HAYDEN. I think also sufficient care was not used in some cases to make a proper soil survey to determine the character of the land that they recommended to a man. When he tried to farm the land, he found he was in trouble.

Mr. NIELSEN. That is right. Soil and drainage have been our most difficult problems.

Chairman HAYDEN. You will be more careful about that in the future, I hope.

Mr. NIELSEN. We certainly will try to, sir.

Senator DWORSHAK. How many projects have you permitted them to move from recently?

Mr. MITCHELL. Two, Riverton and Shoshone, both in Wyoming.

Chairman HAYDEN. I think it might be well to put into the record the number of settlers that have moved from the other projects, the number of acres that they gave up and where they have moved to.

Mr. NIELSEN. We will make that table.

(The material referred to follows:)

Relocation of settlers under act of Aug. 13, 1953

Project on which lieu unit has been selected	Project from which exchange applicant moved and number of settlers involved	
	Riverton	Shoshone
Columbia Basin	10	0
Minidoka	39	19
Gila	21	0
All-American Canal system, Coachella division	8	0
Total	78	19

Acreage relinquished to date under act of Aug. 13, 1953

Project	Number of units	Acreage		
		Gross	Initially irrigable	Irrigable at relinquishment
Riverton	63 [1]	9,090	7,162	4,175
	Average	144.3	113.7	66.3
Shoshone	3 [1]	448	267	231
	Average	149	99	77
Total		9,538	7,429	4,406

[1] 15 additional Riverton applicants and 16 additional Shoshone applicants engaged in clearing title preparatory to relinquishment.

Mr. NIELSEN. Incidentally, you have had a few come down to your State.

Chairman HAYDEN. Yes, that is my complaint. Senator Dworshak and I are in exactly the same position.

Senator DWORSHAK. You are in the rehabilitation business down there.

Mr. NIELSEN. It is nice to have that kind of area in your State, though.

Chairman HAYDEN. Yes, it is.

What about Palisades?

TOTAL FARM UNITS TO BE SETTLED

Senator DWORSHAK. I have one other question, Mr. Chairman, with the drawing of the 100 units including those that relocated Friday at Rupert, how many units will be settled?

Mr. MITCHELL. In total?

Senator DWORSHAK. Yes, on that Minidoka north side.

Mr. MITCHELL. They are planning 220 farm units for 1956 and approximately the same number in 1957.

Senator DWORSHAK. How many?

Mr. MITCHELL. 220 in 1956 and about the same number in 1957.

Senator DWORSHAK. That first 220 will include the drawings of last Friday, I presume?

Mr. MITCHELL. That is correct.

Senator DWORSHAK. And next year you are going to have even a larger drawing? It will be about that same amount or larger?

Mr. MITCHELL. About 220.

Senator DWORSHAK. So you will virtually double the size of the farms under cultivation when you complete next year's drawing?

Mr. MITCHELL. Yes, sir.

Senator DWORSHAK. And that will leave how many to complete the existing plan for settlement there? I think it was 700, was it not?

Mr. MITCHELL. Roughly 700 altogether. That will leave roughly 200.

Senator DWORSHAK. That is all, Mr. Chairman.

PALISADES PROJECT, IDAHO

PROJECT DATA

AUTHORIZATION

Initially authorized in 1941 as the Palisades Dam and Reservoir project by presentation to the President and Congress of a report and findings of feasibility by the Secretary of the Interior on December 9, 1941 (H. Doc. No. 457, 77th Cong., 1st sess.) under the provisions of section 9 of the Reclamation Project Act of 1939 (53 Stat. 1187). Subsequently reauthorized by Congress on a larger and broader basis under the act of September 30, 1950 (64 Stat. 1083).

LOCATION

Palisades Dam is being constructed on the south fork of the Snake River at Calamity Point, about 8 miles west of the Idaho-Wyoming boundary, 57 miles east and upstream from Idaho Falls, Idaho.

DESCRIPTION

The basic plan for Palisades project calls for construction of an earth-fill dam 260 feet high and 2,200 feet long at the crest, a tunnel spillway, two outlet tunnels, a reservoir with capacity of 1,400,000 acre-feet, a powerplant with installed capacity of 114,000 kilowatts, and transmission facilities necessary for interconnection with other projects as authorized.

The Palisades Reservoir will provide supplemental irrigation water for 650,000 acres of land located in the upper Snake River Valley. The 114,000 kilowatt powerplant will provide hydroelectric energy to serve irrigation pumping, municipal, and rural cooperative loads. Direct flood protection will be provided for land on the Snake River Plain above American Falls Reservoir.

STATUS

Preconstruction surveys were started in 1945 and the first two contracts were awarded in 1949. Full-scale construction activities started in December 1951. On June 30, 1954, the project was 39 percent complete.

Work during the current year will include continuation of construction of the dam and powerplant; completion of fourth section of highway relocation except surfacing; completion of the Snake River bridge in Wyoming; completion of reservoir right-of-way acquisition; continued manufacture of turbines, generators, gates, and other equipment. New contracts to be awarded include the fifth and final section of highway relocation, the final section of Forest Service road relocation, and the remaining areas of reservoir clearing. Fund transfers will be made to the Forest and Fish and Wildlife Services.

REPAYMENT

Costs of $23,326,000 allocated to flood control, fish and wildlife, and recreation will be nonreimbursable. Costs allocated to irrigation and power will be returned under reclamation law. Water users will pay $9 per acre-foot for 1,200,000 acre-feet of active space which will result in the return of $10,800,000 of the irrigation allocation, leaving a balance of $24,388,000. Costs allocated to commercial power ($15,886,000), plus interest during construction thereon ($1,311,000) will be reimbursable with interest. In addition, power will pay without interest that part of the irrigation allocation in excess of the water users payment ability ($24,388,000). Therefore, power will return a total of $41,585,000 in 58 years.

Contracts for 712,000 acre-feet of irrigation space at $9 per acre-foot which involve provisions for water savings have been entered into with 41 water users organizations. Agreement has also been reached on the basic principle involving the balance of the space. Processing of the contracts is well underway. The rate of $9 per acre-foot of storage space was based upon studies of the value of the supplemental water provided by Palisades to the lands under irrigation in the upper Snake River Basin.

No sales contracts for power from the Palisades powerplant have been executed except that future delivery contracts with preference customers for Palisades firm power have been in effect for several years. Current negotiations with both preference customers and private utilities are being conducted with respect to delivery points, load factors, power rates, wheeling charges, and sale of summer surplus energy.

Amount to be repaid and repayment period

	Amount	Repayment period		Total
		Regular	Development	
			Years	*Years*
Irrigation	$10,800,000	1957–96	0	40
Power	41,585,000	1957–2014	0	58

Repayment of costs allocated to irrigation

Water users	$10,800,000
Power	24,388,000
Total	35,188,000

Repayment costs per acre

Federal investment, per acre	$50
To be repaid—	
From irrigators	15
From power revenues	35

Annual water users charges, Construction, Operation and Maintenance total (most of the lands furnished supplemental water from Palisades are under private development for which information is not available).

Gross crop income per acre resulting from project irrigation: $80 estimated.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1934; advanced planning, 1945; construction, 1951.

Date of functional completion of construction: Fiscal year 1958.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1945, $250,000.

COSTS

At time of reauthorization in September 1950 the construction cost of the project was estimated at $76,601,000. As a result of favorable bid prices and the revision of the transmission line layout, it has been possible to reduce the official project construction cost estimate to $74,400,000. The latter cost is allocated in the following manner:

Irrigation	$35,188,000
Commercial power	15,886,000
Flood control	22,733,000
Fish and wildlife and recreation	593,000
Total	74,400,000

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Storage available for irrigation:				
Supplemental				650,000
New projects				[1] 48,150
Power (kilowatts)				114,000
Power rates (mills per kilowatt-hour):				
Firm—estimated at 68 percent load factor				4.3
Irrigation pumping				3.0
Nonfirm (average)				2.0

[1] Acreage to be shown under individual projects if and when developed.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$74,038,000
Total obligations to June 30, 1954		32,312,906
Allotment, fiscal year 1955	$12,936,000	
Prior-year balance available	2,000	
Total obligations, fiscal year 1955		12,938,000
Allotment, fiscal year 1956	$9,000,000	
Total obligations, fiscal year 1956		9,000,000
Balance to complete		19,787,094

Work proposed, fiscal year 1956

Palisades Dam ($3,595,000).—Construction will continue and progress payments will be made under a prime contract awarded in 1952. Funds are also required for payments to material suppliers under contracts already in effect and to be awarded to support activities under the prime contract at an efficient and economical rate.

Land and rights.—By the end of fiscal year 1955, all rights-of-way necessary for presently contemplated project facilities will have been secured, except for portion of transmission line rights-of-way.

Relocation of existing property ($504,600).—Relocation of the remaining Forest Service road (McCoy Creek to Salt River), which was started in fiscal year 1955, will continue through the year. Relocation of the Wyoming section of United States Highways 26 and 89 will be completed and a contract for surfacing will be awareded in the early part of fiscal year 1956. Funds requested will be needed for payments under these contracts and for supporting activities. Property relocations are geared to the construction schedule for the dam and should continue on the current schedule.

Clearing lands ($228,000).—Progress payments under a contract for clearing reservoir area No. 2 to be awarded in fiscal year 1955 will continue throughout the year. This work must be substantially completed before the start of water storage.

Palisades powerplant ($2,909,000).—Work will continue under the prime contract awarded in 1952 and progress payments will also be made for previously awarded material contracts, and a completion contract to be awarded in the first quarter of fiscal year 1956. Progress on the powerplant at the currently scheduled rate will allow initial power generation to coincide with initial availability of water.

Palisades switchyard ($946,000).—Payments under a completion contract to be awarded in 1956 and for purchase of equipment, including the main power transformers, will be made. The current schedule coordinates the completion of the switchyard and need for this facility due to power generation.

Palisades to Goshen 115-kilovolt transmission line No. 1 ($66,000).—Construction of the remaining 3-mile section of this line will be accomplished under the contract to be awarded for the Palisades to Goshen transmission line No. 2. The present schedule provides for completion of the line by the time of initial power generation.

Palisades to Goshen 115-kilovolt transmission line No. 2 and terminal facilities ($971,200).—This is a new feature start whose construction is necessary to provide an adequate outlet at the time power becomes available from the powerplant in fiscal year 1957. Contracts for construction of this line, substation, and terminal facilities at Goshen will be awarded in the first quarter of fiscal year 1956. Work will continue throughout the year with completion scheduled in fiscal year 1957. The total estimated cost of this item is $1,736,000.

Goshen to American Falls transmission line and terminal facilities.—All activity on this item deferred until future years, dependent on development of need.

Carrier-current communications system ($50,000).—A contract for purchase of this equipment will be awarded in the second half of fiscal year. This communication system, a new feature start, is necessary for operation of the project transmission facilities and should be in service when power is available. The total estimated cost of this item is $129,000.

General property ($5,000).—This amount is a pro rata share of distributive costs from service facilities and general expense costs.

Fish and wildlife and recreational facilities ($27,000).—This amount is for final transfer to the Forest Service for construction of recreational facilities. Initial transfer of $121,000 ($500 to National Park Service) was made in fiscal year 1955 by program change order. Total amount authorized for this item is $148,000.

Chairman HAYDEN. Next is Palisades project in Idaho. Do you have any comment to make there?

Mr. NIELSEN. Not particularly, sir. We are getting along very well, we think, with it.

Chairman HAYDEN. What are you doing for power?

Mr. NIELSEN. For power?

Chairman HAYDEN. Yes. Have you made a contract with the private utility?

Mr. NIELSEN. For construction power?

Chairman HAYDEN. Yes.

Mr. CAMPBELL. Power for construction work is coming in from the Utah Power & Light system over the line which was built into the project for that purpose. At the end of construction that line will

be used to take power out, and a second line is projected likewise. It will take two lines to take the full amount of power out from the project.

COMPLETION DATE

Senator DWORSHAK. When will that construction work be completed?

Mr. CAMPBELL. It will be completed in the late summer of 1956.

Senator DWORSHAK. Will that include the power facilities?

Mr. CAMPBELL. The first unit is scheduled to go on the line in December of 1956. They are presently negotiating contracts for the wheeling and sale of surplus power from the Palisades power project.

Senator DWORSHAK. As you have already testified, you have a line constructed to bring power out to the interchange line that runs north and south?

Mr. CAMPBELL. Yes, sir; at Goshen.

Senator DWORSHAK. And you are not planning to construct a line from that point on at this time?

Mr. CAMPBELL. No, sir. We will deliver at Goshen.

REGULATING DAM BELOW PALISADES

Senator DWORSHAK. Mr. Chairman, at this point I would like to ask someone from the Bureau to answer a few questions concerning the possibilities of the reregulating dam just below Palisades which seems to have created a great deal of interest among the purchasers of storage space in the Palisades, because it will serve to increase the value of that storage, and also increase the generation of power utilizing that water at the reregulating facilities as well as the plant at Palisades.

Is anyone here prepared to testify on that?

Mr. NIELSEN. I have some information on that. Before Palisades was finally settled upon, we knew there were several good sites there. Palisades appeared to be the best. There is an opportunity up there for a reregulating reservoir below Palisades which would not only be useful in terms of firming up Palisades generation, but would, as well, generate, as I remember, about 45,000,000 kilowatts.

Senator DWORSHAK. How much of that is firm?

Mr. NIELSEN. I would not like to say how much is firm. There is a quarter of a billion kilowatt-hours of production possible there.

Senator DWORSHAK. Do you have a statement you would like to put into the record at this point on that reregulating dam?

Mr. NIELSEN. We can provide a statement, sir.

Senator DWORSHAK. I suggest that you do at this point insert a brief comment.

(The statement referred to follows:)

PALISADES PROJECT, IDAHO-WYOMING

REREGULATING DAM AND RESERVOIR, POWERPLANT AND ASSOCIATED FACILITIES

The Palisades project, which was authorized in 1941 and reauthorized by Public Law 864, 81st Congress, is a multiple-purpose development that involves functions of irrigation, power, flood control, recreation, and fish and wildlife. The project consists of a dam; powerplant of 114,000-kilowatt capacity on the Snake River near Irwin in Bonneville County, Idaho; a reservoir of about 1,400,000 acre-foot capacity and some 21 miles long; a fish hatchery, and recreation facilities. About

650,000 acres of land now subject to water shortages will receive a supplemental water supply and 48,150 acres of new land in other projects will receive water from Palisades storage. The storage will also provide important flood control to the upper Snake River Valley.

During the investigations for a dam and storage reservoir of about 1½ million acre-foot capacity, some 27 sites were considered. Ultimately the Palisades site was selected as the most desirable for the storage project. Included in the search for storage sites, one of the alternatives considered was that of Burns Creek. While the Palisades site which was selected was superior for the large storage dam, the Burns Creek site, 32 miles downstream from Palisades, is ideal for a reregulating dam.

A preliminary evaluation of a reregulating dam and reservoir together with associated facilities was made in May of 1955 and summarized in a preliminary evaluation report. The dam would be an earth-fill structure about 128 feet above the streambed and would create a reservoir of about 73,700 acre-feet at normal water surface elevation of 5,206 feet. Active capacity would be about 16,700 acre-feet. Included in the development plan for the reregulating dam would be a powerplant of 45,000 kilowatts installed capacity rated at 95-foot average head for full power output. Average annual production would be about 249 million kilowatt-hours.

Since preparation of the initial plan and the start of construction on the Palisades project, power requirements of the area—particularly for irrigation pumping—have increased sharply. A large requirement for reliable seasonal energy for irrigation pumping is now in prospect. The city of Idaho Falls (a municipal system) has indicated its desire to purchase all firm power available from Palisades; the cities of Burley and Rupert and three REA cooperatives have also requested power. The Palisades output is insufficient to meet increased requirements of the cities and a growing irrigation pumping load. During the course of negotiations on the marketing of Palisades power, it also has become apparent that there is a need for peaking power in that market area. The development of a reregulating reservoir below Palisades Dam would permit closer control of irrigation releases above all canal headings and would make possible more effective use of the capacity of the Palisades powerplant in meeting the growing requirements. Integrated operation of Palisades and the reregulating reservoir would undoubtedly increase the value of Palisades output and thus improve the payout of Palisades project. In addition to enhancing the value of the power at Palisades, additional power, amounting to some 249 million kilowatt-hours, would be available at the reregulating site itself.

Because of the growing demand for power in this area, it is highly desirable that every effort be made to maximize the power production of the Palisades powerplant and the study of the reregulating reservoir which offers the most promising prospects for achieving this goal should be undertaken as soon as possible. Although this work is not now included in the Bureau's fiscal year 1956 program, it is estimated that the detailed investigations and designs, including the preparation of a feasibility report, can be accomplished for about $85,000 if funds for this purpose could be made available in the general investigation item.

METHOD OF FINANCING

Chairman HAYDEN. This is the same principle as the Davis Dam below Boulder.

Mr. NIELSEN. In good measure; yes. More nearly it parallels Keswick in the Central Valley.

Senator DWORSHAK. Would you suggest to expedite consideration of this, because of the widespread recognition of its full importance in utilizing fully those water resources at the Palisades site, that some funds be earmarked in this appropriation, or will you have ample funds in your general investigation appropriations during the next year to initiate some engineering work to determine whether the reregulating reservoir should be recommended and work started as soon as possible?

Mr. NIELSEN. We would prefer not to have to cover this within the GI estimate and, instead, take either construction funds or about $85,000 of additional GI appropriations.

Senator DWORSHAK. All of which would be reimbursable?

Mr. NIELSEN. Yes, sir; if the plant is built.

Senator DWORSHAK. And tied into the reregulating dam proposal which would be a part of Palisades or separate if it were to be approved subsequently?

Mr. NIELSEN. Yes, sir.

Senator DWORSHAK. Which would it be, a part of Palisades or a separate development?

Mr. NIELSEN. It will be a part of Palisades for operation purposes.

Senator DWORSHAK. It will be tied together?

Mr. NIELSEN. Yes, sir.

Senator DWORSHAK. It would not make any additional water available but it would make additional power, and it would be merged into one operating account?

Mr. NIELSEN. Yes, sir. The water users have requested that we make such an investigation or study.

Chairman HAYDEN. The way we would go about it would be to add $85,000 to your general investigations money?

Mr. NIELSEN. That would be a good way of doing it; yes, sir.

Chairman HAYDEN. Yes. Then you would have it in a clean, regular way, without in any way interfering with the construction now underway.

Mr. NIELSEN. That is right.

COMMUNICATION

Senator DWORSHAK. Mr. Chairman, I would like to have included in the record a copy of a letter from Mr. H. T. Nelson, the regional director of region 1, on this matter.

Chairman HAYDEN. The letter will be included in the record.

(The letter referred to follows:)

DEPARTMENT OF THE INTERIOR,
BUREAU OF RECLAMATION,
REGIONAL OFFICE, REGION 1,
Boise, Idaho, May 25, 1955.

Hon. HENRY C. DWORSHAK,
Senate Office Building, Washington, D. C.

MY DEAR SENATOR DWORSHAK: I am attaching herewith a copy of a letter report that evaluates a proposed reregulating dam, powerplant, and reservoir at the Burns Creek site on Snake River below Palisades Dam, on the basis of a reconnaissance design and cost estimate that has just been completed by the Chief Engineer.

In keeping with the desires of the upper Snake River water users and also because of the obvious advantages made possible by electrical and hydraulic integration with the Palisades project, the report is based on a financial analysis of the combined project. This means that data for the Burns Creek project, calculated on the basis of current procedures and standards, were added incrementally to the presently authorized Palisades project. Part of the Palisades analysis, particularly that pertaining to repayment, had been revised since reauthorization to reflect changes in procedures. However, other parts of it had not been revised since reauthorization in 1950.

The revisions that have been made in the Palisades analysis to reflect current procedures and data include:

1. The estimates of the construction and annual operating costs were brought up to date.
2. Provisions were made in the payout analysis to provide for interest during construction on the commercial power investment.
3. It was assumed that the interest on the commercial power investment for the combined project would be returned to the Treasury rather than be used for financial assistance to irrigation.

Items in the Palisades analysis which were not revised to conform to current procedures include:

1. Final allocation of costs.
2. The calculation of power benefits; and
3. The treatment of taxes foregone.

Since the Palisades project is now authorized and under construction, it did not seem justifiable in this preliminary report to reanalyze the entire Palisades project.

The report indicates that the Burns Creek Dam, Reservoir, and powerplant would cost $22,350,000, which, when added to the current estimated cost of the Palisades project ($74,400,000), would result in a total cost for the combination project of $96,750,000. The report also shows that the power allocation could be returned in 51 years and that all reimbursable costs associated with the combination project, including the financial assistance to irrigation in connection with the Palisades project, could be returned in 60 years. The financial assistance for the Michaud Flats project would extend the payout period to about 63 years. The report further indicates that the addition of the reregulating reservoir to Palisades project would result in an overall benefit-cost ratio of 1.30 to 1. The at-site benefits for the reregulating reservoir alone would exceed the costs associated therewith.

I should emphasize that time as well as funds and data available to us this year did not permit issuance of a feasibility report. Therefore the estimates used in the report are, of course, preliminary and reconnaissance in nature. The report has not received official examination and clearance through the Denver and Washington offices and, of course, ultimate departmental clearance would be necessary prior to review by the States and Bureau of the Budget.

I believe, however, that the cost estimates are conservative and on the high side. Within the next few months we expect to receive approval for a further reduction in the official cost estimate of Palisades Dam and Reservoir. In addition to that, I am hopeful that detailed site and design studies will permit a reduction in the cost of the Burns Creek development also. Either one or both of these would operate to even better the estimated feasibility picture presented in the attached report.

Sincerely yours,

H. T. NELSON, *Regional Director.*

PEMBINA RIVER, N. DAK., INVESTIGATION

Senator YOUNG. Mr. Chairman, while we are talking about investigation funds, may I ask a question?

Chairman HAYDEN. Yes, sir.

Senator YOUNG. This is on the Pembina River in North Dakota.

Mr. Nielsen, I have a letter from you dated May 27, in which you indicate that the total amount necessary for that project would be $50,000. This involves about $35,000 in the first year and $15,000 in the succeeding year. Have you made any investigation at all of that project?

Mr. NIELSEN. That is not presently budgeted. Our investigations so far are very, very general in nature, and we have very little concrete work done on this.

Senator YOUNG. In order to secure any work for it, we would have to increase the appropriations there?

Mr. NIELSEN. Yes, sir; Our present program would have to be increased or we would have to drop something else out of the program.

Chairman HAYDEN. In view of the fact that you ask for more money for investigation, but you could not get it even under the budget ceiling, you really do not have all the investigation money you would like to have now. It seems to me that if you are going to undertake entirely new work, the place to do it is to add to that figure, and earmark it. Then you know you will get the work done.

LETTER FROM NORTH DAKOTA STATE WATER CONSERVATION COMMISSION

Senator YOUNG. Mr. Chairman, I would like to have inserted in the record as a part of my remarks a letter from Mr. Milo W. Hoisveen, secretary and chief engineer of the North Dakota State Water Conservation Commission. This letter was addressed to me under date of May 17.

Chairman HAYDEN. You may include that and any other references you have, in the record.

(The letter referred to follows:)

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION,
Bismarck, N. Dak., May 18, 1955.

Hon. MILTON R. YOUNG,
United States Senator,
Washington, D. C.

DEAR SENATOR YOUNG: Copies of the following petition as well as this letter are being forwarded to all of the North Dakota Congressmen.

The petition pertains to the formation of an irrigation district in Pembina and Cavalier Counties. It was recently received in this office and shows extreme interest in forming an irrigation district in that part of the State. Water for this project would be obtained through a proposed storage reservoir to be constructed in the Pembina River. The project would be multiple purpose in scope in view of the fact that it would afford cities below the dam flood protection and provide irrigation waters for the proposed irrigable lands in those counties.

I have been amazed at the interest shown in irrigation by farmers in that particular locality. During a recent meeting at Walhalla many of the farmers in attendance were not concerned over the fact that they were not able to plant their crops because of the wet soil conditions but they were apprehensive over what damage would be caused to their crops as a result of the usual drought period which occurs during July and August. This, I believe, presents a healthy condition in respect to irrigation possibilities in any area.

The Corps of Engineers has made a tentative cost estimate relative to the proposed dam for the Pembina River. This dam will require a trifle higher benefit-cost ratio than the one presently determined for the single feature of flood control to justify construction. The possibility of irrigating 25,000 acres of land in that area will almost double the benefit-cost ratio requirements for the construction of the dam.

The Bureau of Reclamation will, if funds are appropriated to them, make an investigation of the area relative to the irrigation possibilities. A reconnaissance soil survey has been made in the vicinity of the proposed project and there are well over 25,000 acres of excellent soils available for irrigation. For the most part the topography of the land will adapt itself readily to irrigation. Leveling costs can be held to a minimum cost.

It appears to be an excellent project and should be studied as to its irrigation potential. Your efforts in obtaining funds for the Bureau of Reclamation to make this study will be greatly appreciated by the State Water Conservation Commission and the farmers affected by this project.

I have been informed that the Bismarck Bureau of Reclamation office has forwarded an estimate of the cost of investigation to Commissioner Dexheimer. The Corps of Engineers is also interested in obtaining the irrigation feasibility studies for this project and I am certain an excellent project can be constructed through these two agencies.

If we can supply you with any further information pertaining to this project, we will be glad to do so.

Sincerely yours,

STATE WATER CONSERVATION COMMISSION,
MILO W. HOISVEEN,
Secretary and Chief Engineer, State Engineer.

UNITED STATES DEPARTMENT OF THE INTERIOR,
BUREAU OF RECLAMATION,
Washington 25, D. C., May 27, 1955.

Hon. MILTON R. YOUNG,
United States Senate, Washington 25, D. C.

MY DEAR SENATOR YOUNG: In response to your telephone request, we believe that a reconnaissance investigation of the irrigation possibility in Pembina County, N. Dak., could be made for about $50,000. This would involve about $35,000 in the first year and $15,000 the succeeding year. That estimate is based on the assumption that the Corps of Engineers, who has done considerable work in that area, already has estimates of water uses in Canada upstream from the proposed reservoir. As you know, the Pembina River is an international stream and there may likely be international complications involved in making an investigation of irrigation possibilities.

Sincerely yours,

E. G. NIELSEN, *Acting Commissioner.*

FUNDS FOR GARRISON DIVERSION PROJECT

Senator YOUNG. May I ask this question: How much money is there in the bill now for investigations of the Garrison diversion irrigation project?

Mr. NIELSEN. $750,000 for 1956.

Senator YOUNG. Do you think that it will be sufficient for this year—that amount?

Mr. NIELSEN. I understand we asked for about $968,000.

Senator YOUNG. What was that last statement?

Mr. NIELSEN. I understand that we could use about $968,000.

Senator YOUNG. And there is $750,000 this year in the budget estimate?

Mr. NIELSEN. In the budget estimate; yes, sir.

Senator YOUNG. Thank you, Mr. Chairman.

Chairman HAYDEN. Senator Dworshak?

Senator DWORSHAK. Does that complete the testimony on Palisades?

Mr. NIELSEN. Unless there are other questions.

POWER SITUATION IN BURLEY, IDAHO

Senator DWORSHAK. Mr. Chairman, at this time I would like to refer briefly to one aspect of the development tied in jointly with Palisades project and the Minidoka project, North Side pumping division, in south-central Idaho. I have recently conferred with Commissioner Dexheimer of the Bureau of Reclamation, calling to his attention a serious problem which I think requires solution in the near future. I do not want to put this letter in the record, but I want to refer briefly to the situation which is something like this: That on December 15, 1950, the Bureau entered into a contract with the Idaho Power Co. covering electrical service. That was at the time the Anderson Ranch Dam was completed and additional power was available to the Bureau. Mr. Chairman, I understand that a few years ago in the city of Burley, which has a municipal distribution system, and the Raft River REA in Cassia County, Idaho, the area

served by the Minidoka project, requirements for additional power have developed. The Bureau takes the position that it is not required to furnish that additional power, which I contend should be available from the Federal powerplant at Anderson Ranch Reservoir.

The Bureau contends that, and I quote from the letter as follows:

All power sales contracts which the Bureau has made during the past 8 or 10 months contain a provision as follows: "Nothing in this contract contained shall obligate or be construed to obligate the United States to increase any contract rate of delivery hereunder. If additional power is not available from the United States, the responsibility for securing additional power shall rest wholly with the contractor."

The letter also indicates that this provision was not included in the older contracts, to which I have just referred, with the city of Burley and the Raft River REA, but that nevertheless it is the guiding principle now in effect throughout the Bureau system.

I have contended that, under the preference clause for furnishing Federal power, the city of Burley and the Raft River REA are entitled to get some of the power which currently is available at Anderson Ranch Dam. I do not believe the Bureau can justify this, because recently it adopted a guiding principle which does not obligate the Bureau to furnish to preferential customers additional power; that you can easily disregard the requirements of those two agencies dealing with the Bureau for many years.

What is your comment on that?

Mr. NIELSEN. There are two aspects to that, I think, Senator, one of which, of course, goes to departmental policy. The second aspect is the availability of power, and Mr. Campbell can tell you about that.

Mr. CAMPBELL. With respect to your comment, Senator, Raft River REA and the Minidoka system are getting Anderson Ranch power. We have here a statement of the 1950 contract which you referred to, which I can read.

PREPARED STATEMENT

Senator DWORSHAK. Is it a long statement? Why do you not just put it into the record.

Mr. CAMPBELL. I can put it into the record.

Chairman HAYDEN. You may put it into the record.

(The statement referred to follows:)

SUMMARY OF CONTRACT BETWEEN THE BUREAU OF RECLAMATION AND THE IDAHO POWER CO.

The contract with the company (symbol No. I74r–1506) is for the sale of power and energy to the company and for wheeling service to the loads of the United States and its customers.

The United States shall generate and deliver to the company from its hydroelectric plants at Black Canyon Dam on the Payette River, at diversion dam on the Boise River, at Minidoka Dam on the Snake River, and Anderson Ranch Dam on the Boise River, in any one year, 124,553,000 kilowatt-hours of primary energy (kilowatt-hours scheduled by company), of which 3,650,000 kilowatt-hours of peaking energy shall be for the company's own use. The balance is for Bureau loads and associated losses. The peaking energy for the company is calculated

on the basis of a 5-hour average daily peaking each month of 2,000 kilowatts. The United States will deliver secondary energy to the company (energy in excess of critical water supply year of 225,500,000 kilowatt-hours) which the company desires to accept and purchase.

The maximum demand of the United States and its customers to be served over the facilities of the company is established as definite amounts for stated portions of each year and the amount of energy to be delivered by the company during these periods is as follows:

Period	Maximum demand (kilowatts)	Maximum energy (kilowatt-hours)		
		Primary	Secondary	Total
May-August	22,000	53,561,000	4,138,000	57,699,000
September	21,000			
November-March	14,600	43,824,000		43,824,000
April and October	17,900	13,574,000		13,574,000
Total		110,959,000	4,138,000	115,097,000

The company is to pay the United States for its power and energy and for the various related privileges accorded to it under the contract as follows: (1) monthly payments of $10,604.17 for power and energy and related privileges with a provision for reduction of this payment in event the secondary energy available to the company is less than 27,500,000 kilowatt-hours, (2) $0.0019 per kilowatt-hour for primary energy delivered to the company for loads of United States and which is not required for such loads, (3) $0.001 per kilowatt-hour for secondary energy in excess of 27,500,000 kilowatt-hours during any year, and (4) $0.0011 per kilowatt-hour for secondary energy delivered to the company for the loads of the United States and its customers which is not required to meet such loads and is used by the company.

The payment for wheeling fees for power and energy transmitted by the company to loads and customers of the United States is as follows: (1) west of Glenns Ferry 1 mill per kilowatt-hour; (2) east of Glenns Ferry 1.5 mills per kilowatt-hour. In addition to the above charges, a payment of 2.3 mills per kilowatt-hour for delivery over company lines operating at a voltage less than 44,000 volts (except for delivery to north side pumping division wells). For delivery to north side pumping division an additional charge of 2 mills per kilowatt-hour. Power and energy supplied to United States loads and customers during interruptions of power deliveries to company by United States shall be at a price to be agreed on with company.

The company may with certain limits provide for the temporary storage of water in Federal reservoirs and also under certain limits schedule generation of primary and secondary energy by Federal powerplants.

The reactive load imposed on the company's system by customers of United States shall be carried by Federal powerplants at all times when requested by company.

The amount of payment by company to United States shall be reduced, if United States for any reasons cannot deliver full amount of primary power and energy for company's use and also for delivery to United States and its customers, and if the United States and its customers use power and energy in excess of amounts specified in the schedule quoted above. The amount of such reduction shall be a sum equal to the kilowatts of deficiency in delivery to company or excess of use by the United States times $0.30 plus kilowatt-hours of such deficiency or excess times $0.005.

The contract shall remain in effect until October 31, 1963, subject to right of either party to cancel at end of any month on or after October 31, 1956, by 3 years' advance written notice.

TOTAL ENERGY GENERATED

Mr. CAMPBELL. Let me recite a couple of figures from this.

Senator DWORSHAK. All right.

Mr. CAMPBELL. Under the contract, the Government generates at Black Canyon Dam, Anderson Ranch Dam, and the seventh unit at Minidoka, a total of some 124,553,000 kilowatt-hours of primary energy annually. Of that, 3,650,000 kilowatt-hours go to the Idaho Power Co. It is what we refer to as peaking energy. It is available 5 hours a day, and is not useful in serving a continuing load. In other words, it is of limited use in serving these loads.

Senator DWORSHAK. Is that available throughout the entire year or just in certain months?

Mr. CAMPBELL. It is divided up throughout the entire year, yes, sir. Of the balance, 115,097,000 kilowatt-hours is used in servicing the Bureau's own loads, such as the Payette division pumping loads, the Owyhee pumping loads, and the loads on the Minidoka system, together with a portion of the north side load. That, together with the losses, uses up just about all of the power that is available from that combination of plants. There is remaining, depending upon water conditions, a certain amount of seasonal power, which is not assured, and which comes at odd intervals, and which is not useful in serving loads such as you refer to in the Minidoka and Raft River systems.

ADDITIONAL POWER TO PREFERRED CUSTOMERS

Senator DWORSHAK. In this letter, Mr. Dexheimer disclaimed any responsibility for furnishing additional power to these preference customers. Do you think that there is no obligation there so long as some of the power generated at the Federal facilities at Anderson Ranch are going to a private utility? Do you not think that there is some conflict there? We just a few minutes ago were talking about basic legislation and basic policy. Do we not have a conflict here?

Mr. CAMPBELL. Not to my mind, sir, because the amount of power that is being sold would not, on a firm basis, be a drop in the bucket, compared to the needs that exist on the Minidoka system. In other words, if you take the 3,600,000 kilowatt-hours divided by 8,000 hours in a year, you only come up with a very limited amount of power.

TOTAL POWER GENERATED AT MINIDOKA DAM

Senator DWORSHAK. How much power is being generated by the Bureau at the Minidoka Dam site now?

Mr. CAMPBELL. About 13,000 kilowatts.

Senator DWORSHAK. Is that maximum?

Mr. CAMPBELL. Yes, sir. That is about the installed capacity there, and we run it right up to the hilt all the time.

Senator DWORSHAK. Where is that power going now?

Mr. CAMPBELL. On the Minidoka system.

Senator DWORSHAK. All of it?

Mr. CAMPBELL. Yes, sir. Units 1 to 6 take care of that.

Senator DWORSHAK. What does unit seven do?

Mr. CAMPBELL. Unit seven goes to Milner, and then the balance into this pool which comes into the north side and the Minidoka load.

Senator DWORSHAK. So far as the Bureau is concerned, then, you do not anticipate there will be any additional power available until the plant goes into operation?

Mr. CAMPBELL. That is correct. Palisades is not going to relieve the situation greatly, because, as you know, there is a very limited amount of firm power at Palisades. It is only in the nature of some 15,000 to 20,000 kilowatts, which is urgently needed in the area. That is, in Idaho Falls and some of those other REA's.

Senator DWORSHAK. You do realize that the Raft River REA and Burley do have preferential status and are certainly justified in stating that the Bureau should furnish the power necessary?

Mr. CAMPBELL. We have never contested their preference at all. We have, up until now, been able to carry their loads.

Senator DWORSHAK. You are reasonably sure that you cannot get any power from Anderson Ranch to supplement this demand?

Mr. CAMPBELL. No, sir. It would be infinitesimal.

Senator DWORSHAK. There is no other possibilities that can be developed at this time?

Mr. CAMPBELL. No, sir. The only possibilities are the reregulating reservoir that you mentioned.

Senator DWORSHAK. That will be 2, 3, or 4 years at the earliest?

POWER SOURCE

Mr. CAMPBELL. That is right. There will be a block of Palisades energy available when that comes on the line. But we are just at the bottom of the bucket, sir.

Senator DWORSHAK. Who is furnishing power to these units that you are bringing in for GI settlement?

Mr. CAMPBELL. The first 10 are being supplied from Anderson Ranch. The balance is being served by energy purchased from the Idaho Power Co.

Senator DWORSHAK. By the Bureau?

Mr. CAMPBELL. Yes, sir.

Senator DWORSHAK. For resale?

Mr. CAMPBELL. No, sir; for its own use in pumping, the well pumping on the north side.

Senator DWORSHAK. When these wells are taken over by the new settlers, the Bureau will not be directly obligated, will it?

Mr. CAMPBELL. No, sir. When Palisades comes in, of course, it will supply that power.

Senator DWORSHAK. But at the present time the Bureau is buying power from Idaho Power, with which to generate the wells which are now in operation to irrigate these new units which are being brought in on the Minidoka north side extension?

Mr. CAMPBELL. On a seasonal basis, yes, sir, not on a firm year-round basis.

Senator DWORSHAK. Then the Bureau holds out no hopes to those two distributing preference customers that they can get any power in less than probably a couple of years?

Mr. CAMPBELL. That is right, sir, and then the picture is not too rosy.

Senator DWORSHAK. Thank you.

Chairman HAYDEN. Is there any comment on Fort Peck?

FORT PECK PROJECT, MONTANA-NORTH DAKOTA

Project Data

AUTHORIZATION

Fort Peck Act of May 18, 1938 (52 Stat. 403, 16 U. S. C., 833, et seq.).

LOCATION

In the Yellowstone, Missouri, and Milk River areas of north central and northeastern Montana.

DESCRIPTION

Bureau of Reclamation facilities consist of a system to transmit energy generated by a Corps of Engineer powerplant of 85,000-kilowatt capacity at Fort Peck Dam. Facilities include 1,090 miles of transmission lines ranging from 34.5- to 230-kilovolt capacity, and 28 substations with a total capacity of 385,450 kilovolt-amperes, and an undetermined number of future irrigation pumping transmission lines and substations in the Milk, Yellowstone, and Missouri River areas. This system of transmission lines and substations interconnects the Fort Peck system with the Missouri River Basin project system and provides services to irrigation pumping projects, REA cooperatives in the Fort Peck project area and two other privately owned public-utility systems.

STATUS

The total project-cost estimate was reduced from $25,061,000 to $23,277,000 (anticipated total obligations $21,378,794). This is primarily due to the elimination of certain high-voltage switchyard equipment and related transmission facilities from the Bureau program, which the Corps of Engineers will now provide to serve the second powerplant, and transfer of proposed irrigation pumping electrical supply facilities to their respective irrigation units.

Construction of facilities for marketing Fort Peck power began in 1945. By the end of fiscal year 1955, construction is scheduled to be 50 percent complete. This will complete the major portions of all lines and substations except the 230-kilovolt main-stem interconnection between Fort Peck powerplant and Bismarck, N. Dak.; those future transmission or tapline facilities required to serve the various proposed irrigation pumping units along the Yellowstone, Missouri, and Milk Rivers; facilities to Whately for service to the Glasgow Airbase and Montana Power Co.; enlargement work at Rainbow substation; and reactive control equipment for general system stability at various locations.

REPAYMENT

The allocation of costs to powerplant and irrigation plant is based on interim allocations of cost to power development approved by the Federal Power Commission, dated April 20, 1943. Under this interim allocation, the Commission has determined that the entire cost of the powerplant should be allocated to power development and reserves the right to allocate the cost of joint facilities between power development and other facilities. The total power cost of the project has been divided between interest-bearing and interest-free investment on a basis of the kilowatt-peak demand usage for irrigation pumping and commercial loads in the Missouri Basin area. The total power costs of the project will be repaid from power sales revenue.

HISTORY OF PROJECT DEVELOPMENT

Initial date:

Planning, 1943 by Corps of Engineers.

Advanced planning, act of May 18, 1938, authorizing Bureau of Reclamation to provide, construct, operate and maintain facilities necessary to market energy from the powerplant.

Construction, 1945, Bureau portion.

Date of functional completion of construction—June 1961, except for stage 3 construction of Williston substation, Saco 161-kilovolt line and substation and transmission lines and substations for REA and irrigation pumping loads in the Milk, Yellowstone, and Missouri River areas, which are scheduled for construction after fiscal year 1961.

Costs

Original estimated construction cost	$5, 050, 000
Allocation of cost: Power	5, 050, 000
Present estimated construction cost	23, 277, 000
Allocation of cost: Power	23, 277, 000

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956
Power (kilowatts): Bureau of Reclamation			
Power (kilowatts):			
Corps of Engineers	85, 000	85, 000	85, 000
Firm, 50 percent load factor	5. 4	5. 4	5. 4
Nonfirm (average)	3. 3	3. 3	3. 3

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$21, 378, 794
Total obligations to June 30, 1954		9, 894, 794
Allotment, fiscal year 1955	$475, 000	
Prior year balance available	13, 000	
Total obligations, fiscal year 1955		488, 000
Allotment, fiscal year 1956	325, 000	
Total obligations, fiscal year 1956		325, 000
Balance to complete		10, 671, 000

Work proposed, fiscal year 1956

Fort Peck-Glendive 115 kilovolts transmission line and substations ($98,299).—Contracts will be awarded for installation at Glendive substation, of the 15,000 kilovolt-ampere transformer bank and associated regulators and switches which will be removed from the Williston substation.

Dawson-Miles City 115 kilovolts transmission line and substations.—Completed in fiscal year 1955.

Dawson-Williston 115-kilovolt transmission line and substations ($45,076).—Funds required for a 115-kilovolt power circuit breaker at Dawson County Substation for protective measures, since this substation ties in by means of a short line to the Glendive Substation where a 15,000-kilovolt-ampere transformer is to be installed in parallel with existing property.

Transmission lines and substations for REA and irrigation pumping loads.—(Yellowstone River area) scheduled for completion in fiscal year 1955.

Fort Peck-Williston 115-kilovolt transmission lines and substation ($13,000).—The program will complete the remaining work required on installation of a 30,000-kilovolt-ampere transformer bank at Williston Substation, and will permit transfer of the replaced 15,000-kilovolt-ampere transformer bank to Glendive Substation.

Fort Peck-Dawson County 230-kilovolt transmission lines and substation.—Programed for start of construction in fiscal year 1957.

Fort Peck-Wolf Point 34.5-kilovolt transmission lines and substations.—Completed in prior years.

Missouri-Souris, Montana, transmission lines and substations.—Scheduled for start of construction in fiscal year 1959.

Transmission lines and substations for REA and irrigation pumping loads, Missouri River area.—Completed in prior years.

Fort Peck-Great Falls 161-kilovolt transmission lines and substations.—Scheduled for completion in fiscal year 1955.

Fort Peck-Whately 69-kilovolt transmission lines and substation ($100,000).—Construction contracts will be awarded to begin construction of a new 15-mile-long, 69-kilovolt line from Fort Peck powerplant to the existing Whately Substation and equipment contracts will be awarded for breakers and switches to modify the Whately substation. These system additions will permit increased power deliveries to area cooperatives so that the Glasgow Air Force Base can be supplied

with power, and will permit firm power deliveries to the Montana Power Co. at Whately substation.

Transmission lines and substation for REA and irrigation pumping loads, Milk River area.—Scheduled for construction after fiscal year 1961.

Havre-Shelby 115-kilovolt transmission line and substations ($50,000).—Provides for additions to Shelby substation. Electrical facilities for a direct delivery to the Glacier County Electric Cooperative have been arranged between the cooperative and the Bureau. The cooperative now receives its power supply through the system of a neighboring cooperative. All work will be completed during the current fiscal year.

Metering equipment and other tangible plant ($10,000).—Additional metering equipment to accommodate new customer connections and additional delivery points to existing customers will be installed at various points on the system. Miscellaneous additional property installations relating to customer service will also be required.

Reactive power control equipment.—Scheduled in fiscal year 1958 and fiscal year 1959.

General property ($10,255).—Funds are required to complete the carrier current radio communication system, necessary for proper power dispatching and system control.

Chairman HAYDEN. This is an old established project. I assume at Fort Peck there is a continuation of the transmission system?

Mr. NIELSEN. Yes, sir.

Chairman HAYDEN. When are you going to complete it? We have been appropriating money every year as far back as I can remember.

Senator YOUNG. There is a line there now; is there not?

Mr. NIELSEN. Yes, sir.

Senator YOUNG. What are you going?

Mr. CAMPBELL. That is the Fort Peck-Whately line, Senator, which was the original line built in connection with taking construction power into the project. It has just about worn itself out. The majority of the poles are stubbed, and we find that the poles are rotting above the stubs above ground. The conductor is very small. The load that it is required to carry now is much larger than the load it was originally designed for. In fact, it was originally a 44-kilovolt line and has been reinsulated to 69,000 volts. It has just reached the point where we feel to render adequate service it should be replaced.

Chairman HAYDEN. Are you replacing it with steel towers?

Mr. CAMPBELL. No, sir, we would replace it with a wood pole line of 69,000 volts, similar to the other lines.

CARLSBAD PROJECT, NEW MEXICO

PROJECT DATA

AUTHORIZATION

The Carlsbad project was authorized in 1905 by the Secretary, and Alamogordo Dam was authorized by the Secretary of the Interior under a finding of feasibility approved by the President on November 6, 1935, under the Federal reclamation laws. Spillway enlargement authorized by Public Law 465, 83d Congress, July 1, 1954.

LOCATION

In the Pecos River Valley in DeBaca, Guadalupe, and Eddy Counties of southeastern New Mexico.

DESCRIPTION

The project irrigation works consist of 3 reservoirs (Alamogordo, McMillan, and Avalon) 184 miles of canals and laterals, a 514-foot concrete flume across Pecos River, 24 miles of drains; a concrete diversion dam on Black River and appurtenant facilities. In addition to forming a storage reservoir, Avalon Dam

also serves as the diversion works for the project to serve about 25,000 acres. The Alamogordo Dam spillway enlargement consists primarily of lowering and paving the existing dike section and increasing the height of the present dam embankment.

STATUS

All of the features of this project are complete, except for the proposed enlargement of the spillway on Alamogordo Dam, for which a contract will be awarded in fiscal year 1955, and are in operation. The Bureau of Reclamation operates and maintains Alamogordo Dam and Reservoir and the Carlsbad Irrigation District operates and maintains the balance of the project facilities.

REPAYMENT

In regard to the completed work, the original net construction cost of the project, $1,141,761, which includes Avalon and McMillan Dams and the distribution and drainage systems, was fully repaid in 1947. A supplemental contract dated January 16, 1936, and amended October 5, 1943, fixes the maximum obligation for Alamogordo Dam and project betterments at $2,600,000 to be paid in 40 equal annual installments. The district began payments on this contract in 1946, and in addition, advanced necessary funds for operation and maintenance of project works. The cost of enlarging the spillway of Alamogordo Dam to accommodate floods of major proportions is nonreimbursable in accordance with the provisions of Public Law 465, 83d Congress.

HISTORY OF PROJECT DEVELOPMENT

Initial date, Planning, 1905; advance planning, 1905; construction, 1905.

Schedule of development

Irrigation (system): Irrigable acreage for service, full:	*Number*
Initial operation, 1906	19,650
Through fiscal year 1954	25,055
Fiscal year 1955	25,055
Fiscal year 1956	25,055
Ultimate	25,055

Alamogordo Dam Spillway Enlargement

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$1,471,000
Total obligations to June 30, 1954		
Allotment, fiscal year 1955	$300,000	
Total obligations, fiscal year 1955		300,000
Allotment, fiscal year 1956	$1,171,000	
Total obligations, fiscal year 1956		1,171,000
Balance to complete		

Work proposed, fiscal year 1956

Spillway enlargement ($1,180,500).—The program provides for completion of the Alamogordo Dam spillway enlargement under the single construction contract to be awarded in fiscal year 1955. The construction organization at the site of work will be only that required to complete all work in fiscal year 1956.

Chairman Hayden. What is new at Carlsbad, N. Mex.?

Mr. Nielsen. We will finish the spillway alterations in fiscal year 1956.

Chairman Hayden. That is winding up the job?

Mr. Nielsen. Yes, sir.

TUCUMCARI PROJECT, N. MEX.

Chairman HAYDEN. How about Tucumcari? There is no money at all there.

Mr. NIELSEN. That is right.

Chairman HAYDEN. That is a completed job?

Mr. NIELSEN. Essentially.

Chairman HAYDEN. Will any more money need to be expended?

Mr. NIELSEN. Not so far as we know, except possibly for a regulating reservoir on the main canal.

MIDDLE RIO GRANDE PROJECT, NEW MEXICO

PROJECT DATA

AUTHORIZATION

The plan for the Middle Rio Grande project was approved by the Congress in the Flood Control Act of 1948 (62 Stat. 1171, 1179), and completion of the plan approved in the Flood Control Act of 1950 (64 Stat. 170, 176).

LOCATION

The project lies in the Middle Rio Grande Valley in north-central New Mexico. It extends from the Colorado-New Mexico boundary south to the backwaters of Elephant Butte Reservoir and includes rectification of the Rio Grande in the vicinity of Truth or Consequences, N. Mex. (formerly Hot Springs).

DESCRIPTION

The project plan, developed jointly by the Bureau of Reclamation and the Corps of Engineers, provides for the construction of certain river control works, rehabilitation of existing works, and further development of the lands within the Middle Rio Grande Conservancy District. The Bureau of Reclamation will undertake the rehabilitation and extension of existing irrigation and drainage systems, together with channel rectification, eradication of nonbeneficial vegetation, and improvement of the main channel throughout the Espanola and Middle Valleys and the reach below Elephant Butte Reservoir to the upper end of Caballo Reservoir.

STATUS

The total estimated construction cost of the project has been increased from $22,506,000 to $23,306,000 (estimated total obligations $29,208,874) primarily due to an increase in cost and quantity of channel rectification work to be done in future years.

By June 1954 about 96 percent of the emergency channel construction had been completed. Two small contracts will be completed early in fiscal year 1955 and all emergency channel construction in the San Marcial area will be completed about the middle of fiscal year 1955. By June 30, 1954, construction had started on rehabilitation of the canal system and about 34 percent of the drainage construction was completed.

The contracts for rehabilitation of El Vado and Isleta Dams were awarded in September 1954. Advance planning type work for rehabilitation of the canals, laterals, and channel rectification will continue through fiscal year 1955. Operation and maintenance of completed portions of the channel rectification works was started during fiscal year 1954. In accordance with terms of the repayment contract, the Middle Rio Grande Conservancy District may request the Government to operate and maintain the irrigation system during construction. As presently planned, the project will operate and maintain the district system after February 1, 1955, using funds advanced by the district for that purpose.

REPAYMENT

Status of repayment contract negotiations

A repayment contract was executed with the Middle Rio Grande Conservancy District on September 24, 1951, whereby the district agrees to repay a maximum of $18 million in 40 years after completion of construction. This amount includes a maximum of $7,560,000 for acquisition of district bonds and is subject to reduc-

tion, at the option of the district, by the amount paid by the district on principal and interest after January 1, 1952. The present estimate is based on water users taking advantage of this reduction. The remainder of the costs allocated to irrigation, $1,707,000 is for service to Indian lands and is nonreimbursable.

Repayment of costs allocated to irrigation

Water users	$17, 140, 000
Indian lands (nonreimbursable)	1, 707, 000
Total	18, 847, 000

Repayment costs per acre

Federal investment per acre	[1] $167. 00
To be repaid—	
From water users	167. 00
From power revenue	--------
Annual water-user charges:	
Construction	4. 55
Operation and maintenance	3. 20
Total	7. 75

[1] For 100,016 acres of non-Indian lands only.

Increased net income per acre resulting from project irrigation (payment capacity), $12.27.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1920; advanced planning, 1950; construction, 1951 (emergency channelization).

Date of functional completion of construction: Fiscal year 1959, except channel rectification in Middle Valley.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1952, $1,463,000.

Construction costs

Original estimated cost	$30, 179, 000
Allocation of cost:	
Irrigation	20, 506, 000
Flood control	9, 100, 000
Programs of other Interior agencies	573, 000
Present estimated construction cost	23, 306, 000
District bonds	6, 700, 000
Present estimated project costs	[1] 30, 006, 000
Allocation of cost:	
Irrigation	18, 847, 000
Flood control	11, 159, 000

[1] Includes $6,700,000 cost of acquisition of district bonds but excludes $573,000 estimated cost of programs of other Interior agencies.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$29, 208, 874
Total obligations to June 30, 1954		4, 545, 816
Allotment, fiscal year 1955	$2, 129, 000	
Contribution, State of New Mexico	10, 000	
Total obligations, fiscal year 1955		2, 139, 000
Original allotment, fiscal year 1956	$3, 500, 000	
Additional allotment, fiscal year 1956	3, 700, 000	
Prior year balance available	[1] 3, 000, 000	
Total obligations, fiscal year 1956		10, 200, 000
Balance to complete		12, 324, 058

[1] From any unobligated balance of construction and rehabilitation appropriations on June 30, 1955.

Work proposed, fiscal year 1956

El Vado Dam ($169,549).—Construction will continue and progress payments will be made under a prime contract awarded in September 1954. Additional funds will be needed to award a contract to stabilize the left abutment of the dam. All work on this feature will be completed during the fiscal year.

Isleta Diversion Dam ($32,039).—Construction will continue and progress payments will be made under a prime contract awarded in September 1954. Two small contracts to rehabilitate the gate hoists and install a lighting system will be awarded. All work on this feature will be completed during the fiscal year.

Angostura diversion works ($57,200).—A construction contract to rehabilitate this feature will be awarded. All work will be completed during the fiscal year.

San Acacia diversion dam ($91,800).—A construction contract to rehabilitate this feature will be awarded. All work will be completed during the fiscal year.

Deep wells.—Program completed in fiscal year 1955.

Canals ($1, 600, 934).—The necessary rights-of-way will be acquired, and construction contracts for four settling basins on the main canals awarded and completed during the year. $150,000 is programed to extend work initiated during fiscal year 1955 in cooperation with the Corps of Engineers for construction of conveyance structures for Atrisco Canal. Two additional construction contracts for Atrisco feeder canal and Atrisco siphon will be awarded, with construction continuing into the following fiscal year. Four dredges for the settling basins will be acquired and installed during the last half of the year.

Laterals ($207,181).—All investigations necessary to formulate a plan of rehabilitation of the distribution system will be completed and design data for two construction contracts will be submitted to the Denver office.

Drains ($683,597).—Construction will continue and progress payments will be made under a contract awarded in 1954. Six additional contracts for rehabilitation of open drains will be awarded and completed during the year. Field investigations will continue on the closed drains and design data submitted for three construction contracts to be awarded in fiscal year 1957.

Channelization, San Marcial area.—Program completed in fiscal year 1955.

Channel rectification, Middle Valley ($306,900).—The total amount represents costs of investigations during the year. These investigations will include a contract, estimated at $200,000 for prototype channelization work. This prototype is to be used to obtain information in developing a definite plan for channel rectification in the Middle Valley. Sedimentation studies and other channel investigations will continue during the year.

Channel access facilities ($51,300).—Heavy equipment crossings on riverside drains for access to channel and levee will be completed.

Improvements, San Marcial area.—Completed in prior years.

Channel maintenance equipment ($111,800) —Additional equipment required for proper maintenance of completed channel works will be purchased.

General property ($169,700).—Equipment necessary to adequately operate and maintain the rehabilitated irrigation system during construction will be purchased. A $70,000 contract will be awarded to construct additional facilities for the district division field offices.

Acquisition of district bonds ($6,700,000).—At the present time, the district is compelled to spend a substantial sum of money each year on the redemption of bonds and payment of interest. Funds should be provided for the purchase of these outstanding district bonds to improve the financial affairs of the district and so assure earlier return of the reimbursable project costs. In addition, assumption by the Bureau of the operation and maintenance of the irrigation facilities and coordination of this work with the operation and maintenance of the channelization facilities is dependent upon redemption of the outstanding bonds. Because of increased efficiency that would result, it is highly desirable to accomplish this at an early date.

Chairman HAYDEN. How about the Middle Rio Grande project? There is a supplemental estimate here. Do you care to make a statement about that.

Mr. NIELSEN. Yes, sir. Do you want me to submit it for the record?

Chairman HAYDEN. Can you highlight it?

Mr. NIELSEN. Yes, sir. The authorizing legislation there provided for us taking over and retiring the bonds of the Middle Rio Grande

Conservancy District so that they might be relieved of interest payments. As well, the district had a problem of making equitable assessments under conditions relating to those bonds. By our retiring those bonds we could come to a more equitable assessment of charges. We are in here now seeking to buy those bonds as is contemplated by the law. We think the time is here to buy them, because the interest is eating us up. I have a statement which I submit for the record.

(The statement referred to follows:)

MIDDLE RIO GRANDE PROJECT

PURCHASE OF BONDS

Irrigation has been practiced in the Middle Rio Grande Valley for centuries, first by the Indians, later by the Spanish colonists, and then by the Anglo-Americans. Maximum development was reached about 1880. After that date, there was a general physical and economic downtrend because of floods, sediment deposition, and waterlogging which resulted in destruction or impairment of irrigation facilities. During the early part of the present century, several unsuccessful efforts were made to develop a completely adequate program of rehabilitation for the area. The Middle Rio Grande Conservancy District which was organized in 1925 was the most successful of these and under its direction bonds were marketed to finance the construction of many improvements and remedial works.

During the 1930's and 1940's, it became evident that despite the efforts of the district the economic stability of the area was again seriously threatened because of a combination of problems with which the local people could no longer cope. The coordinated assistance of the Corps of Engineers and the Bureau of Reclamation was sought and on November 21, 1947, a project plan developed jointly by these agencies was agreed upon by the Secretary of the Army and the Secretary of the Interior. The plan provides for construction of certain flood-control reservoirs and levees by the Corps of Engineers with the Bureau of Reclamation having responsibility for channel rectification of the Rio Grande, rehabilitation and extension of the irrigation and drainage works including El Vado Reservoir for the Middle Rio Grande Conservancy District, and acquisition of the outstanding bonds of the district. The latter measure was specifically required to make possible a much-needed overhaul of assessment procedures and the attainment of economies in interest costs.

The comprehensive plan was approved in the Flood Control Acts of 1948 and 1950 (June 30, 1948, and May 17, 1950). On September 24, 1951, the United States and the Middle Rio Grande Conservancy District entered into a contract to provide for rehabilitation and construction of project works and repayment of reimbursable construction costs thereof in conformance with the comprehensive plan. Work on the physical rehabilitation is underway by both the Corps of Engineers and the Bureau of Reclamation in accordance with the plan. So far the program of essential financial rehabilitation authorized by the Congress in the acts cited above has not been undertaken. The following paragraphs describe this portion of the overall program.

The Middle Rio Grande Conservancy District was organized in 1925 and by 1935 had completed El Vado Dam, 4 diversion dams, and about 630 miles of canals and laterals with associated work. In 1929 the district financed this work by selling $8,675,000 in principal amount of 5½ percent bonds; later through the Reconstruction Finance Corporation, the State of New Mexico, and finally through private investors.

Numerous defaults occurred and relief measures, including the scaling down of interest, were ineffective. In 1946 the district refinanced through the sale of $8,026,000 in refunding 3½ percent bonds with maturity dates and all callable after August 1, 1949, at par plus accrued interest and a small premium. These bonds are held in small blocks all over the country. The district established guaranty fund under State law, not to exceed a 2 mill levy on the assessed valuation of property within the district, and not to exceed 15 percent of the outstanding bonded debt of the district.

The bonds to be retired after August 1, 1949, totaled $7,751,280 including premiums of $137,280. Retirements have been effected, including $400,000

retired August 4, 1954, leaving the $6,700,000 which is now outstanding. The guaranty fund now contains approximately $1,400,000.

The repayment contract established the maximum obligation at $18 million and called for cancellation of the district's outstanding bond debt of $7,560,000 on or before January 1, 1952, and a rehabilitation program to cost $10,440,000. It was established that the maximum total amount the district would be able to repay would be dependent upon both purchase of its bonds and full accomplishment of the work of rehabilitation programed. The first action recommended was cancellation of the bond debt to eliminate interest, as a measure of financial relief. To insure the continued economic feasibility of the project, in line with the $18 million maximum obligation, article 11 of the repayment contract provides that in the event the United States fails to acquire the bonds as contemplated on or before January 1, 1952, then payments made by the district on its bond account would, at the option of the district, reduce its maximum obligation of $18 million by the amount of principal and interest thus required to be paid. The repayment obligation is based upon the cost of proper rehabilitation in the amount of $10,440,000 plus the face value of the bonds. Thus any interest costs of the district may reduce the amount the United States can recover from the district under the contract, and could thereby force a commensurate reduction in the rehabilitation program. Repayment feasibility is promised upon a full development, and will be adversely affected by any change, and greatly affected by a substantial change.

Interest payments by the district since January 1952 on the outstanding obligation equal about $1 million and thus may reduce the sum available for rehabilitation by about 10 percent. If the bonds are never acquired as authorized and as contemplated in evaluating the project, total interest of about $4 million will be required to be paid by the district, and the resultant reduction in project improvement will change the entire feasibility.

Failure to purchase the bonds controls another material factor as well. The assessment procedure of the district is directly related to the outstanding bond issue in that no changes in method of assessment can be accomplished while the bonds remain outstanding. Many inequities have developed over the years. Some low-value lands are so heavily overtaxed that they are no longer farmed. Other areas have been improved by millions of dollars, yet are not bearing a pro-rata share of the district expense. The reclamation plan requires a correction of this situation. Its proposals anticipate the bond cancellation. Phases of the rehabilitation will be infeasible unless the assessment procedure is corrected. Continuation of work requires a determination of intent. If the original project cannot be accomplished, through delay in purchasing outstanding bonds, the United States will be required to change the construction program as it has now been scheduled for fiscal year 1956, and any such change will detrimentally affect the feasibility of the original project as authorized by the Congress.

Purchase of the bonds now will save about $185,000 per year in interest charges. The repayment period to the Government begins upon completion of rehabilitation. If repayment is assumed to start in 5 years, the district will have saved over $900,000 which will be applied to repayment to the Government. In addition, with the application of the guaranty fund of $1,400,000, the net cost of acquiring the bonds will be $5,300,000.

COMMUNICATION

Chairman HAYDEN. At this point I would like to include in the record a letter addressed to Senator Chavez from Mr. John P. Murphy, executive secretary of the Middle Rio Grande Flood Control Association. Mr. Murphy's letter includes a legal analysis and an economic analysis of the proposal to buy the bonds.

(The letter referred to follows:)

MIDDLE RIO GRANDE FLOOD CONTROL ASSOCIATION,
Albuquerque, N. Mex., March 30, 1955.

Hon. DENNIS CHAVEZ,
United States Senator, Room 429, Senate Office Building,
Washington, D. C.

DEAR SENATOR CHAVEZ: First attached is a legal analysis made by Frederic K. Gray, legal department, bureau of reclamation, Amarillo, Tex., in answer to the inquiry as to: "Why is it necessary for the United States to acquire and cancel

the outstanding bonds of the Middle Rio Grande Conservancy District in connection with its rehabilitation of the District irrigation system?"

Second attached is a technical analysis made by J. R. Justice, economist, bureau of reclamation, Albuquerque, N. Mex., on the same subject: "Need for Bureau of Reclamation to purchase Middle Rio Grande Conservancy District bonds."

It is hoped that the Congress will soon appropriate funds for acquisition of these bonds by the Federal Government, therefore we felt you might like to have copies of these two studies for your own evaluation and use.

Hubert Ball and I will be in Washington for the appropriation hearings for Bureau of Reclamation and Civil Functions just as soon as we are notified as to the dates.

Thanking you for your splendid cooperation at all times, I am,

Yours sincerely,

JOHN P. MURPHY,
Executive Secretary.

ANALYSIS

(By J. R. Justice, economist, Bureau of Reclamation, Albuquerque, N. Mex., May 12, 1954)

NEED FOR BUREAU OF RECLAMATION TO PURCHASE MIDDLE RIO GRANDE CONSERVANCY DISTRICT BONDS

1. The convervancy district law of the State of New Mexico, under which the Middle Rio Grande Conservancy District was organized, was patterned to fit the needs of the district to be organized and operated thereunder. The immediate need motivating the enactment of this legislation and the creation of the district thereunder was the protection of the city of Albuquerque and its environs from periodic floods on the Rio Grande. However, the official plan included the reclamation of irrigable lands in the Middle Rio Grande Valley including some 40,000 acres already under irrigation from diversion, and canal works carrying waters to which such land had vested water rights.

2. The Middle Rio Grande Conservancy District now comprises the lands proposed to be included in the Middle Rio Grande project. As now organized this district is in the nature of a local improvement district. The flood control and irrigation features already constructed constitute the improvements. The benefits for such construction are spread over all lands and properties in the district in various amounts. The costs of existing flood control and irrigation works, constructed in accordance with the official plan (modified) adopted by the district, are outstanding and evidenced by a bond issue. To retire these, bond assessments are made in accordance with the benefits already permanently established. These established benefits are set against the land and property for payment of bond indebtedness and cannot be charged except for expenditures incurred by the addition of new improvements.

3. A local improvement district is one organized through a petition and hearing in which all property owners have an opportunity to be heard. The organization undertakes a certain defined improvement of common benefits to all included property. Upon creation and the carrying out of the official plan of improvement, the benefits are spread and the costs thereof assessed in proportion to the benefits derived by such properties. On the basis of that assessment, a levy is forthwith made against all such properties in accordance with the benefits, and such a levy constitutes a perpetual lien until paid against each parcel of property. On the payment of the assessment levied against any specific property, it is thereby relieved of the lien and of any further costs with respect to such improvements regardless of the default which might be made in payment of assessments by any other property in the district.

4. The total appraised benefits of the completed plan were fixed somewhat arbitrarily, at about $22 million. The actual construction costs were about $9,200,000. The benefits to the works so constructed were allocated at about 57 percent to urban properties and utilities and 43 percent to agricultural properties. The benefits established by the appraisers were confirmed by the conservancy court, and become the fixed appraisal of benefits for all or any part of the official plan. This appraisal is the basis for assessments against such property and lands for the costs of the works, and remains fixed during the existence of the district's bonded debt secured by lien thereon. (The lien was fixed at about 44 percent of original appraised benefits.) The appraisers in considering lands suitable for

agricultural purposes, followed the practice of making the highest assessments against those lands that likely would receive the greatest benefits due to new drains and better irrigation facilities. Those lands already under cultivation, and receiving irrigation water and not in need of immediate drainage would receive less benefits, and, therefore, were assessed lower. This method worked a hardship on some landowners who were not able to improve (develop) their nonirrigated land. These nonirrigated lands consisted of bosque, salt grass and pasture, swamp, mesa land, and sand dunes. The appraised benefits ranged from $90 to $120 per acre on these lands, and carry an original assessment ranging from $39.60 to $52.80 per acre. The land under cultivation was appraised from $65 to $95 per acre, with an assessment ranging from $28.60 to $41.80 per acre.

5. The assessment of benefit to urban property, public utilities, public corporations and to improvements (buildings) on agricultural land were computed on 10 percent of the appraised value fixed by the board of appraisers.

6. The basis of assessment is economically unsound as to agricultural property and is inequitable to urban properties.

(*a*) It has resulted in the owners of undeveloped or unproductive lands allowing their holdings to pass to the State of New Mexico as tax title lands.

(*b*) Delinquent assessments on some agricultural lands now exceeds the normal value of the land. In many instances this land is unsuited for a sustained irrigated agriculture and its best use is for the limited grazing offered.

(*c*) The State has become the owner of some 15,000 (as of 1954) acres of tax delinquent lands. The removal of the lands from the tax rolls will necessitate the raising of taxes on taxpaying lands for State, county, and school revenue.

(*d*) Urban properties, public utilities, etc., as in agricultural land, all had their assessed valuation for the payment of the bonded obligations fixed at the inception of the district. These properties were appraised on the basis of improvements present at that time. No allowance was made at the time of appraisal for the removal or addition of improvements that may occur at a future date. The board of appraisers saw fit to appraise undeveloped agricultural land and in many instances land unsuited for permanent irrigated agriculture, at a high rate but urban property was appraised in the conditions at time of appraisal. If a lot contained a building at the time of appraisal and the building is destroyed by fire, the original assesessment of benefits are fixed and remain against the lot. A lot vacant at the time of the appraisal of benefits upon which extensive improvements have been constructed, carries an assessment of benefits as set at the time of appraisal.

6. The purchase of the Middle Rio Grande Conservancy District's refunding bonds by the Bureau of Reclamation would permit the adjustment of an economically unsound and inequitable assessment now in evidence.

(*a*) The Bureau of Reclamation would become the owner of all outstanding bonds now owned by the district; the cost of acquisition of these bonds together with the added rehabilitation costs would be spread in an equitable and just manner according to the ability of the properties to pay.

(*b*) The purchase of these bonds would permit an adjustment on those agricultural lands now burdened with heavy delinquencies which are not capable of supporting sustained irrigated agriculture.

(*c*) The purchase of the bonds would permit spreading the costs to agricultural lands on the basis of the ability of the lands to pay by land classes.

(*d*) Would permit the returning of lands not suited to a sustained irrigated agriculture to the tax rolls as grazing lands.

(*e*) Would permit the Secretary of the Interior to acquire the lands deeded to the State of New Mexico free of the lien now against them for delinquent payments due as well as assessments now charged to them. These assessments are security for the bonds and cannot be removed except by agreement of the bond and property holders and possibly new State legislation. As the report and bill are prepared it provides for the acquisition of tax deed lands, however, the Secretary cannot acquire these lands under present conditions without the payment of the delinquent district charges against them, including delinquent assessments and penalties. This would require the payment of bond principal, interest, and operation and maintenance charges. As has previously been mentioned much of this land is not capable of paying the charges assessed against them, and these lands have become a burden on other lands paying State, county, and school taxes.

(*f*) The purchase of the bonds would permit a much needed adjustment in the assessment on urban property, public corporations and utilities in that the levy for future payments would be placed on an ad valorum or just appraisal basis and require new construction to pay its proportionate share, which cannot be accomplished under present methods.

AMARILLO, TEX., *January 31, 1955.*

Field Solicitor's Memorandum No. 55–6.
To: Regional Director.
Subject: Justification for purchase of outstanding bonds of the Middle Rio Grande Conservancy District by the United States, Middle Rio Grande Project.

You have requested an answer from this office to the following question: "Why is it necessary for the United States to acquire and cancel the outstanding bonds of the Middle Rio Grande Conservancy District in connection with its rehabilitation of the district irrigation system?"

The simple answer to the above question is that assessments cannot be properly levied to cover the increased obligation of the district, so long as the existing bonds are outstanding.

There are two basic issues involved. The first is, as stated above, to obtain a vehicle for accomplishing repayment; the second is to accomplish that repayment through an equitable allocation of the cost.

In first considering a plan for development of the Middle Rio Grande Basin, the report of the Department of the Interior contained in project planning report No. 5–15.1–0, dated March 1946, reads, in part, as follows (p. 51):

"The New Mexico laws permit reassessment of benefits for operation and maintenance charges, but not for accomplished construction costs. (See *Durand v. Middle Rio Grande Conservancy District*, 46 N. Mex. 138; 123 Pac. (2) 389.) It is proposed that outstanding refunding bonds representing construction costs of existing works be retired and the obligations for proposed project works be assessed upon an equitable basis such as would provide an incentive for full development of the project.

EXTRAORDINARY PRINCIPLES OF CONTRACT

"The present method of spreading the assessments upon the rural lands of the district to meet the payment of this bond obligation is believed faulty. To continue under such method of assessment of the benefits as the district is required to do under its present form, with the assessment of construction benefits, permanently fixed at its inception, the solvency of the district and its ability to meet its obligations, both to its bondholders and to its water users and other like beneficiaries of the district plan, may be jeopardized.

"In general, any contract between the district and the United States should be in pursuance of the Federal reclamation laws as modified by specific direction of the Congress in pursuance of the provisions of section 9 (*a*) of the Reclamation Project Act of 1939. Some such required specific modifications are as follows; No construction of the project should be authorized until a contract satisfactory to the Secretary of the Interior, hereinafter referred to as the Secretary, has been executed among the United States, the Middle Rio Grande Conservancy District and the State of New Mexico in pursuance of the provisions of the Federal reclamation laws and the laws of the State of New Mexico relating to the organization and powers of conservancy districts as such State laws may be amended in substance satisfactory to the Secretary. By the terms of such agreement it should be provided among other things:

"(1) That the United States will agree to acquire outstanding bonds of the district at prices and on terms satisfactory to the Secretary and to assume the obligation of the district created thereby or of such part thereof as the Secretary deems necessary, and that no construction will be initiated until the Secretary has so acquired said bonds."

The opinions expressed above were converted into a covenant of the repayment contract, dated September 24, 1951. Article 37 of that agreement reads in part as follows:

"* * * Provided, it is the intent and purpose of both parties to this contract that the acquisition and cancellation by the United States of the outstanding bonds, evidencing the present bonded obligations of the district, as provided in article 9 (*a*) of this contract, shall be accomplished at the earliest date possible in order that:

"(*a*) The present method of assessment under the Conservancy Act may be discarded and the more equitable method of assessment adopted, as provided herein under the terms of the Conservancy District Reclamation Contract Act and the Federal reclamation law.

"(*b*) Savings may be made to the district and the United States by the elimination of interest payments on the outstanding bonds."

The case of *Durand* v. *Middle Rio Grande Conservancy District* (123 Pac. 2d, 389), considered the constitutionality of a proposal of the New Mexico Legislature in 1940 to accomplish relief for certain lands of the district. This relief act would have deferred charges assessed against uncultivated lands of the district for approximately 15 years. It was pointed out in the decision of the court that such an arbitrary and discriminatory apportionment of assessments would be violative of the due-process-of-law clause of the Federal Constitution. The narrative discussion of the case concluded that such a deferment would have two detrimental effects. It would cast an unwarranted burden upon lands remaining subject to assessment and would restrict the protection supporting the bonded indebtedness of the district. The case cited paragraph 77–2906 (3) (b) of the New Mexico Statutes, 1941, annotated, which provides that under no circumstances shall any assessment levy be made that will in any manner, or to any extent, impair the security of any bond issued, or the fund available for the payment of the principle and interest.

The same question was again raised during proceedings for confirmation of the current repayment contract, dated September 24, 1951. Under New Mexico law, confirmation proceedings are before a State district court sitting as a conservancy court. The contract was confirmed in said conservancy court in a hotly contested case. The decision was appealed to the Supreme Court of the State of New Mexico in the case of *Middle Rio Grande Water Users Association* v. *Middle Rio Grande Conservancy District*, filed May 11, 1953. The appellants urged rejection of the contract on many points. Point eight argued that the proposed repayment contract and obligation which it established violated the due process clause of the Federal Constitution. They relied upon the case of *Durand* v. *Middle Rio Grande Conservancy District*. In its decision, the Supreme Court distinguishes from the Durand case on the premise that the bonded indebtedness would be eliminated, and that the indebtedness referenced in the amendatory contract was an entirely new and different obligation from the former bonded indebtedness. The decision on this point is as follows:

"Here the United States will pay off the present bonded indebtedness, amounting to some $7 million, and it will be included in the not to exceed $18 million reimbursable costs (based on 1947 prices), without interest. A new method of assessment will be provided which will not, we believe, run counter to the decision in the Durand case. Section 37 of the contract provides:

"* * * Provided, it is the intent and purpose of both parties to this contract that the acquisition and cancellation by the United States of the outstanding bonds, evidencing the present bonded obligations of the district, as provided in article 9 (*a*) of this contract, shall be accomplished at the earliest date possible in order that:

"(*a*) The present method of assessment under the Conservancy Act may be discarded and the more equitable method of assessment adopted, as provided herein under the terms of the Conservancy District Reclamation Contract Act and the Federal reclamation law.

"(*b*) Savings may be made to the district and the United States by elimination of interest payments on the outstanding bonds."

You will note in the above decision particularly that the conclusion that the Durand case was not controlling was premised upon the plan of the contract to provide a new method of assessment and they again relied upon section 37 of the contract in support of this conclusion. Thus, it is reasonable to assume that the Court would have held that in the absence of a contract obligation to acquire the bonds, that the project plan was unconstitutional under the Conservancy District Act.

In addition to the convincing case law discussed above to the effect that the acquisition of the bonds would be mandatory, there is still the question of feasibility of the project without recourse to laws not otherwise available. Under State law the appraisal of benefits cannot be reduced where bonds have been issued; thus an equitable apportionment on a new basis would have been difficult, if not impossible.

The property owners in the Durand case argued that any change in method of assessments by reason of a new law would impair the existing contract between the property owner and the district. It was pointed out that the law under which the original bond indebtedness was erected provided certain options to the landowner. These options create a consideration for the contractual provisions entered into between the landowner and the district. Thus, there was created a valid and binding contract between the parties which could not be changed because of the enactment of a later law or the same would violate the contract clause of

the Federal Constitution. Because of this decision of the Supreme Court, the district could not change its plan of assessment from that provided for in the 1923 act to that provided for in the 1939 act. The plan of the project as set forth in the 1946 report, as carried into section 37 of the contract, proposed use of the assessment plan provided under the terms of the Conservancy District Reclamation Contract Act (pars. 77–3101 et seq., New Mexico Statutes 1941, Annotated). With acquisition of the bonds as previously set forth, then, the program of repayment approved by the State legislature in 1939 would be available as distinguished from the appraisal of benefits and damages plan set forth in the 1923 Conservancy Act as amended in paragraphs 77–2801 and 77–2802.

This 1939 act resulted from an earlier determination that the method of assessment provided in the original conservancy act was not suited to reclamation development. The Tucumcari project was investigated in the middle 1930's and was the basis for the 1939 legislation. In referring the Tucumcari project repayment contract to the Secretary for approval, by letter dated December 10, 1938, he was advised that the repayment contract required certain proposals to be submitted to the State legislature, including:

"* * * amendments * * * covering matters in which the State law is considered to be ambiguous or deficient in relation to the proposed project, especially with respect to the procedure for the appraisal of benefits on irrigable lands and the levies of assessments based on these appraisals."

Under this 1939 act benefits are considered for two basic groups. Under paragraph 77–3107, the board of directors apportions the annual assessment between class A property and class B property, these classes being defined as irrigable land and nonirrigable land respectively in making assessments. Under paragraph 77–3108, as amended in 1949, the board determines the amount of funds required to meet its obligations and apportions expenses to be collected by assessment and levy as distinguished from these to be paid as tolls or charges by those actually using the system and water. The assessment and levy is then collected from ad valorem taxes. This is the plan that will be effective on the Middle Rio Grande project once the bonds have been acquired.

In conclusion, it was necessary to provide for the acquisition of the bonds of the district for several reasons. First, the old method of assessment was not equitable and greatly reduced the feasibility of the project. The method of assessment and correction of inequities could not be changed because of the contract rule of property adopted by the New Mexico Supreme Court in the Durand case. Second, the new increase in obligation could not be accomplished because of the bonds issued under the 1923 act were protected by law so that they could not be impaired or affected in any manner. The only solution was to pay off the old bonds and eliminate the contractual rights of the parties under their prior agreement, then create a new indebtedness for the total amount and take advantage of the provisions of the 1939 act regarding assessment and levy of taxes.

RIO GRANDE PROJECT, NEW MEXICO-TEXAS

Project Data

AUTHORIZATION

By the Secretary of the Interior on December 2, 1905, under provisions of the act of June 17, 1902.

LOCATION

The project is located in central and south-central New Mexico and El Paso County, Tex. The power transmission system extends from Albuquerque on the north to Las Cruces on the south and from Silver City on the west to the town of Hollywood, N. Mex. on the east. The irrigable area lies south of Percha diversion dam and north of the Hudspeth County line in the State of Texas.

DESCRIPTION

The project consists of Elephant Butte Dam, Reservoir and powerplant on the Rio Grande near Truth or Consequences, N. Mex.; Caballo storage and reregulating dam below Elephant Butte; irrigation systems for full service to lands in New Mexico and Texas in the El Paso area; and a power transmission system serving towns and military establishments in New Mexico.

STATUS

The total estimated construction cost was increased from the previous $16,109,278 to $16,268,609 (anticipated total obligation $16,353,830). The project is substantially complete and in operation. The increase of cost estimate is for collection and accumulation of necessary engineering data for use by the United States in defense of claim of the Atchison, Topeka & Santa Fe Railway Co. for alleged damages. This is the only remaining scheduled activity except for operation and maintenance. All physical facilities of the power and storage division will be complete and in service by the end of fiscal year 1955.

The irrigation division is complete and its annual expenses are financed through funds advanced by the water users, there being two organizations, the Elephant Butte Irrigation District comprising all lands within the State of New Mexico, and the El Paso County Water Improvement District No. 1, those lands lying within the State of Texas.

The water-user organizations have been urged periodically to accept the irrigation facilities for operation and maintenance; however, they prefer to have the Bureau continue these functions using funds advanced by them. The budget for each calendar year to finance operation and maintenance of the irrigation facilities is thoroughly discussed with each of the irrigation districts. In addition to the above, the project is required by international treaty to furnish 60,000 acre-feet annually to the Juarez Valley, Republic of Mexico, and has a Warren Act contract covering excess and waste waters with the Hudspeth County Conservation and Reclamation District No. 1, Hudspeth County, Tex., which has an irrigable area of 19,000 acres of land.

REPAYMENT

Amount to be repaid for the power and storage division and repayment period are:

	Amount
Irrigation [1]	[2] $4,080,075
Power	[2] 9,644,011
Repayment period:	
	Total years
Regular:	
1941 to 1965	25
1941 to 1989	(3)
Repayment of costs allocated to irrigation	
Power revenues	$4,080,075
Total	4,080,075

[1] Irrigation allocation will be paid entirely from power revenues.
[2] Allocations do not include future improvements scheduled from O. and M. funds.
[3] Construction costs allocated to commercial power will be repaid within 50 years from date individual facility becomes revenue producing.

Repayment costs per acre

Federal investment per acre	$25.50
Repaid from power revenue	25.50
Gross income per acre resulting from project irrigation (actual calendar year 1953)	243

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1903; advanced planning, 1905; construction of project, 1906; of power system, 1938.

Date of functional completion of construction: Fiscal year 1955.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1905, $200,000.

Construction costs

Original estimated cost	[1] $8,905,400
Allocation of cost:	
Irrigation	
Power	
Flood control	1,510,654
Mexican Treaty	1,000,000
Unallocated	6,394,746
Present estimated construction cost	[1] 16,268,609
Allocation of cost:	
Irrigation	4,080,075
Power	9,644,011
Flood control	1,510,654
Mexican Treaty	1,000,000
Contribution, Department of Justice	10,960
No-cost transfer, equipment from AEC	22,909

[1] Power and storage division only. Irrigation distribution features were completed prior to period for which allocations were made. Does not include future improvement scheduled from O. and M. funds.

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (acres):				
Full	159,650	159,650	159,650	159,650
Supplemental	18,452	18,452	18,452	18,452
Total	178,102	178,102	178,102	178,102
Power (kilowatts)	24,300	24,300	24,300	24,300
Power rates (mills per kilowatt-hour): Firm at 50-percent load factor	7.1	7.1	7.1	7.1

Elephant Butte Power and Storage Division, New Mexico-Texas

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$16,353,830
Total obligations to June 30, 1954		16,140,558
Allotment, fiscal year 1955	$147,500	
Prior year balance available	25,772	
Total obligations, fiscal year 1955		173,272
Allotment, fiscal year 1956	$40,000	
Total obligations, fiscal year 1956		40,000
Balance to complete		

Work proposed, fiscal year 1956

Completed facilities.—All construction work completed and in service in fiscal year 1955 or prior years.

Elephant Butte Dam and Reservoir ($40,000).—The only work to be underway will be completion of the collection and accumulation of necessary engineering data for use by the United States in defense of the claim for $4 million of the *A. T. & S. F. Ry. Co.*, v. *U. S.* (Court of Claims No. 90–54). The suit by the railway company being brought to recover alleged damages resulting from operation of Elephant Butte Reservoir.

Chairman HAYDEN. You have a very small sum for the Rio Grande project of $40,000. What is that for?

Mr. NIELSEN. That, sir, is principally for servicing a lawsuit that the Atchison, Topeka & Sante Fe has brought against us under which they claim damages from Elephant Butte Reservoir. We have to defend ourselves in that lawsuit, and prepare evidence. We are working with the Department of Justice.

Chairman HAYDEN. That dam has been there so many, many years, and the railroad was there even before that. It was improperly located in the first place, it seems to me.

Mr. NIELSEN. We are rather confused, too, as to why it should be coming up at this late date.

DESCHUTES PROJECT, NORTH UNIT, OREGON

PROJECT DATA

AUTHORIZATION

A finding of feasibility for the Deschutes project was approved by the President on November 1, 1937, under provisions of the Fact Finders' Act of December 5, 1924 (43 Stat. 672). Haystack equalizing reservoir was authorized for construction under Public Law 573 (83d Cong., 2d sess.), approved by the President August 10, 1954.

LOCATION

Central Oregon in Deschutes and Jefferson Counties. North unit project lands are located in Jefferson County in the vicinity of Madras. Project works extend south to Wickiup Reservoir in Deschutes County.

DESCRIPTION

The completed portion of the project provides a full water supply for the irrigation of 50,000 acres through the construction of Wickiup Reservoir, a main canal 65 miles in length, and a system of laterals. The project also furnishes supplemental water to 49,259 acres in established irrigation districts through the reconstruction of the Crane Prairie Reservoir. Project facilities include the Crane Prairie and Wickiup Dams and Reservoirs, unit 3 of the Cove powerplant and an irrigation diversion dam, canal, lateral, and drainage systems all substantially completed and the newly authorized Haystack equalizing reservoir.

Haystack, an off-canal regulatory reservoir located adjacent to the north unit lands, will facilitate delivery and economy in the use of irrigation water by making it possible to adjust between storage releases at Wickiup Reservoir over 100 miles away and the actual day-by-day water requirements of the project lands.

STATUS

The total estimated construction cost of the Deschutes project-north unit has been increased from $12,943,000 to $14,543,000. The change is due to the addition of Haystack equalizing reservoir located immediately adjacent to irrigable lands on the upper portion of the north unit of the Deschutes project. Crane Prairie Dam has been completed for storage of 55,340 acre-feet. Wickiup Dam and Reservoir has been completed for the storage of 187,300 acre-feet. Contracts have been awarded this fiscal year for repair work on the Wickiup Dam outlet works stilling basin, and for modification of the check and wasteway at Crooked River crossing on the north unit main canal. A contract is to be awarded late in fiscal year 1955 to build a permanent-type residence for the reservoir superintendent and dormitory-type building, equipment shop and storage garage. Surveys and investigations for collection of data necessary for the preparation of final designs and specifications for Haystack equalizing reservoir will be largely accomplished. Additional construction appropriations may be required at some time after fiscal year 1956, if need develops for repairs of major fault openings in Wickiup Reservoir, major leaks in main canal or laterals, or for river channel improvements, or completion of Crane Prairie Reservoir clearing. Provision for such additional work is included in the estimated cost of the project and in the repayment contract.

REPAYMENT

Contracts covering the entire reimbursable costs have been executed with the North Unit Irrigation District, the Central Oregon Irrigation District, the Pacific Power & Light Co., the city of Prineville, the city of Culver, and the county of Jefferson.

Although the entire construction cost of the Deschutes project, north unit ($14,543,000) is allocated to irrigation, returns of these costs are being or have been made from water users and other sources.

Amount to be repaid and repayment period

	Amount	Repayment period		Total
		Regular	Development	
North unit irrigation district	[1] $11,713,263	76	10	86
Central Oregon irrigation district	[1] 327,000	39	0	39
City of Prineville	[1] 10,679	10	0	10
City of Culver	[1] 876	[2]	[2]	
County of Jefferson	[1] 123,667	31	0	31
Irrigation power, Cove plant	[3] 515,304	40	0	40
National defense and public works	[4] 1,617,758	[5]	[5]	
Contributions	140,671	[6]	[6]	
Miscellaneous revenues	93,782	[6]	[6]	
Total	14,543,000			

[1] Covered by existing repayment contract.
[2] Lump-sum payment.
[3] Pacific Power & Light Co. is returning transmission costs ($67,938) through a 40-year purchase contract and is paying 2 mills per kilowatt-hour for surplus energy during the irrigation season (April-October). $113,000 has been paid through calendar year 1953 toward return of the costs of unit 3 of the Cove powerplant and diversion dam and at the current rate of return these costs will be returned in an additional 21 years.
[4] Value of work performed by CCC and CPS forces included in costs but considered nonreimbursable for repayment.
[5] Nonreimbursable.
[6] Reimbursement not required.

Repayment costs per acre

	Federal investment per acre	To be repaid		Annual water users charges		
		From irrigators	From power	Construction	Operation and maintenance	Total
North unit irrigation district	$234	$234	0	$2.75	[1]	$2.75
Central Oregon Irrigation District	7	7	0	.21	0	.21

[1] All project irrigation facilities are being turned over to the water users for operation and maintenance.

Gross crop income per acre resulting from project irrigation (actual current year 1953): $108.

HISTORY OF DEVELOPMENT

Initial date: Planning, 1913; advanced planning, 1938; construction, 1938.

Date of functional completion of construction, basic irrigation works: Fiscal year 1949.

Date of functional completion of construction, Haystack Equalizing Reservoir: Fiscal year 1958.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1937, $450,000.

Construction costs

Original estimated cost	$8,000,000
Allocation of cost: Irrigation	8,000,000
Present estimated cost	[1] 14,543,000
Allocation of cost: Irrigation	14,543,000

[1] Includes features not considered in original estimate.

Schedule of development

	Initial operation		Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
	Date	Number				
Irrigation (acres):						
Full			50,000	50,000	50,000	50,000
Supplemental			49,259	49,259	49,259	49,259
Total	1940	46,900	99,259	99,259	99,259	99,259
Power (kilowatts)			1,500	1,500	1,500	1,500
Power rates (mill per kilowatt-hour):						
Nonfirm (average)			2.0	2.0	2.0	2.0

ESTIMATES FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$12,880,252
Total obligations to June 30, 1954		10,517,696
Allotment, fiscal year 1955	$49,400	
Prior year balance available	31,281	
Total obligations, fiscal year 1955		80,681
Allotment, fiscal year 1956	$274,000	
Total obligations, fiscal year 1956		274,000
Balance to complete		2,007,875

Work proposed, fiscal year 1956

Irrigation, storage and general facilities—Completed.—No fiscal year 1956 program. Balance to complete represents possible future leak sealing requirements.

Power facilities—Completed. All project power facilities are complete.

Wickiup Dam and Reservoir ($24,000).—The program provides for completion of the residence for the reservoir superintendent, including a dormitory-type building, and equipment shop, and storage garage.

Haystack equalizing reservoir ($250,000).—These funds will provide for the acquisition of right-of-way, collection of detailed design data, preparation of final designs, award of contracts, and start of construction work on the dam. Supply contracts will be awarded early in the fiscal year for the purchase of gates and hoists.

Chairman HAYDEN. Now we have a new one, the Deschutes project in Oregon. That will cost $12,880,252, and you are asking for $274,000 to start it.

Mr. NIELSEN. The project is essentially complete except for Haystack Reservoir. That is a reregulating reservoir. The main water supply for the Deschutes is some distance from the irrigated land, and this reservoir that we propose would be down nearer the land so that they could more closely regulate their water and lose less water in the process. We have authorization for it, the water users are ready, willing, and able to buy it, and we think it is justified

Chairman HAYDEN. How many acres are affected?

Mr. NIELSEN. There are about 50,000 acres in the district. I do not think you can single out any particular acres that will be served by Haystack. It will be an overall project facility.

Chairman HAYDEN. What you are trying to do is provide a better water supply for existing land now under irrigation?

Mr. NIELSEN. That is right. It is just as if we had more capacity in Imperial, Mr. Hayden; we could save some of our losses there.

WEBER BASIN PROJECT, UTAH

Project Data

AUTHORIZATION

Act of August 29, 1949 (63 Stat. 677).

LOCATION

North central Utah, in Davis, Weber, and Morgan Counties, most of Summit County, and a small portion of Box Elder County. The project works extend west from storage facilities on the Weber River to lands between the Wasatch Range and Great Salt Lake.

DESCRIPTION

The purpose of this project is to develop the basin's unused water for irrigation and municipal and industrial needs, provide needed drainage outlets for the waterlogged lands, protect lands and improvements from flood damage, produce hydroelectric power for irrigation pumping, increase recreational opportunities, improve fish and wildlife resources, and reduce the mosquito infestation in the project area. The project is designed to furnish 164,000 acre-feet of water to 50,500 acres of potentially productive land not now irrigated, and 24,400 acres now only partially irrigated. Approximately 49,000 acres of waterlogged land will be reclaimed. More than 40,000 acre-feet of water will be made available for municipal and industrial use in Davis and Weber Counties. About 65,500 acre-feet of water of return flow below reclaimable lands will be used for migratory waterfowl refuges. Power plants will have an installed capacity of 5,400 kilowatts.

STATUS

The estimated construction cost of the Weber Basin project has been decreased from $70,385,000 to $65,262,000 (anticipated total obligation, $63,187,000). The change is essentially due to adjustment of the project's estimate to reflect actual bid prices on Gateway tunnel, Wanship Dam, and Davis aqueduct. Construction of the Gateway tunnel was started during the second quarter of fiscal year 1953. Construction of this feature was about 70 percent complete at the end of fiscal year 1954. With construction initiated in fiscal year 1953, the immediate objective is to provide the following water and power deliveries in 1957: supplemental water for 2,000 acres of presently irrigated land on which late season water is needed to mature crops and 10,000 acre-feet of municipal and industrial water to relieve critical shortages in the area.

To accomplish this objective, construction of the Wanship Dam, Stoddard diversion works, Gateway Canal and tunnel, Pineview Dam enlargement, Weber aqueduct, and the first section of the Davis aqueduct must be completed in fiscal year 1957. Contracts were awarded for the construction of Wanship Dam and for 18.5 miles of Davis aqueduct. Specifications were issued for Gateway Canal with bid openings scheduled for August 24, 1954. Preconstruction surveys and collection of data for designs and specifications for Weber aqueduct and Stoddard diversion works were completed and the data furnished to the Chief Engineer during fiscal year 1954. Preconstruction operations will continue for Willard Dam and Reservoir, drains, and Pineview Dam and Reservoir enlargement. Contract for Pineview Dam enlargement is expected to be awarded during the last quarter of fiscal year 1955. Construction was initiated on 4 miles of pilot drain to ascertain information for design of the project drainage net.

REPAYMENT

A repayment contract with a maximum obligation of $57,694,000 covering the reimbursable construction costs of the project was executed on December 12, 1952, by the Weber Basin Water Conservancy District. On the basis of the current estimated cost of the Weber Basin project, the total amount to be repaid in 60 years under this contract would be $52,671,000. Of this amount, $35,308,000 is tentatively allocated to irrigation and $17,363,000 to municipal and industrial water users. Of the allocation to irrigation, $26,260,000 would be repaid by water users and $9,048,000 by sale of municipal water. Irrigation blocks will have up to a 10-year development period but no development period applies to municipal water. The Weber Basin Water Conservancy District is negotiating with water

users for the sale of irrigation, municipal, and industrial water. Contracts relating to the enlargement of Pineview Dam and Reservoir, modification of power production at existing plants, the purchase of 5,000 acre-feet of Echo Reservoir storage and the operation of Echo Reservoir for flood control are being negotiated. Other pertinent repayment data are as follows:

Repayment costs per acre-foot of irrigation water

Federal investment per acre-foot	$215.00
To be repaid—	
From water users	160.00
From municipal revenue	55.00
Annual water user charges:	
Construction	2.70
Operation and maintenance	1.00
Total	3.70
Gross crop income per acre-foot resulting from project irrigation (estimate for mature stage of development)	50

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1939; advanced planning, 1949 (September); construction, 1952 (December).

Date of functional completion of construction: Fiscal year 1964.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1953, $1,350,000.

Construction costs

Original estimated cost	$69,534,000
Allocation of cost:	
Irrigation	40,234,000
Flood control	5,900,000
Municipal	18,744,000
Recreation and wildlife	4,656,000
Total construction cost	65,262,000
Transitional development	100,000
Present estimated cost (total)	65,362,000
Allocation of cost:	
Irrigation	35,308,000
Flood control	7,393,000
Municipal	17,363,000
Recreation	3,568,000
Fish and wildlife	1,730,000

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (acres):				
Full				50,500
Supplemental				24,400
Total				74,900
Reclamation waterlogged lands				49,000
Power (kilowatts)				5,400

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$63, 187, 000
Total obligations to June 30, 1954		5, 831, 270
Allotment, fiscal year 1955	$7, 870, 000	
Prior year balance available	30, 000	
Total obligations, fiscal year 1955		7, 900, 000
Allotment, fiscal year 1956	$10, 895, 000	
Total obligations, fiscal year 1956		10, 895, 000
Balance to complete		38, 560, 730

Work proposed, fiscal year 1956

Wanship Dam and Reservoir (*$2,904,000*).—The programed amount will be required for contractor's earnings under the prime contract for continuing construction of Wanship Dam, for clearing the reservoir area, for access roads and for acquisition of land and water rights. This dam, which is the key feature of the initial development, is scheduled to be completed in the spring of 1957.

Wanship power facilities (*$27,700*).—Includes the powerplant, switchyard and an interconnection to existing transmission facilities. The programed amount will be for the preparation of final designs and specifications in order that construction could be undertaken in fiscal year 1957 and power made available in fiscal year 1958 for irrigation pumping in the East Shore area 1 year after the initial water is available.

Lost Creek Dam and Reservoir (*$8,000*).—The amount programed is a pro rata portion of the project development costs.

East Canyon Dam and Reservoir enlargement (*$5,000*).—The amount programed is a pro rata portion of the project development costs.

Gateway Canal and diversion works (*$1,855,000*).—The construction contract will be awarded in the first quarter for the Stoddard diversion works and the connecting canal section along with supply contracts for the purchase of fish screens, metalwork, and minor supplies. Construction will continue and progress payments will be made under the prime contract for the Gateway Canal. These facilities are scheduled for completion concurrently with Wanship Dam in order to convey conserved Weber River flows to project lands.

Gateway power facilities (*$95,700*).—Includes the power plant and switchyard. The programed amount will be for the preparation of final designs and specifications to permit start of construction in fiscal year 1957 in order that power for pumping in initial development areas will be ready in fiscal year 1958, one year after the first water is available.

Weber aqueduct (*$598,000*).—The major portion of the programed amount will be required for contractor's earnings under the prime contract (awarded fiscal year 1954). This facility will provide for distribution of part of the water to be made available through Wanship Dam and the Gateway Canal and diversion works.

Davis aqueduct (*$2,950,381*).—Construction will continue under the prime contract (awarded fiscal year 1953) for schedules 1, 2, and 3 of the aqueduct. The award of contract for schedule 4 of the aqueduct will be made in the first quarter. The rights-of-way will be acquired prior to the start of construction of schedule 4. This facility will provide for distribution of the remaining water to be made available through Wanship Dam and the Gateway Canal and diversion works.

Pineview Dam and Reservoir enlargement (*$1,722,600*).—Construction of the dam will continue with the major portion of the programed amount required for contractor's earnings under the prime contract (awarded fiscal year 1955). In addition, a contract will be awarded for the clearing of the reservoir area in the fourth quarter.

Slaterville diversion works (*$91,000*).—The construction contract for the diversion works will be awarded in the fourth quarter. Minor supply contracts will also be awarded. Acquisition of rights-of-way will be completed prior to award of prime contract. Construction of this facility is geared with the Pineview Dam enlargement.

Willard Canals and pump (*$104,000*).—Field data required for designs and specifications will be collected for the canals and submitted to the Chief Engineer. Acquisition of rights-of-way will commence in this year.

Willard Dam and Reservoir (*$200,000*).—Field studies required for designs and specifications will be completed and design data submitted to the Chief Engineer. Acquisition of rights-of-way will commence in this year.

Warren Canal enlargement and laterals (*$3,000*).—A relatively small amount of investigational work will be undertaken in connection with the development of the project plan.

Layton Canal, pump and laterals (*$43,000*).—Preconstruction surveys will be made for the canal and data assembled for the designs and specifications. A relatively small amount of investigational work will be undertaken on the pump and laterals.

Drains (*$248,000*).—Collection of field data will be continued leading toward the development of a definite project drainage plan. Also, preconstruction surveys will be made and the required field data for designs and specifications collected and a contract will be awarded for the construction of a section of project drain. These drains are vital to prevent damage to productive land by seepage.

General property (*$20,000*).—The programed amount will be used for cooperative work with other Federal agencies in planning and designing the project recreational facilities.

Chairman HAYDEN. Next is the Weber Basin project in Utah. You have an additional amount of $10 million to be added to the $13 million that has been heretofore allotted. What are you going to do with that money?

Mr. NIELSEN. We are going to get well along with Wanship Dam and Reservoir, a principal reservoir feature, so we can complete that in the spring of 1957. We are going to award in the first quarter the contract for the Stoddard diversion dam work on the Gateway Canal. We are going to do some work on the Weber acqueduct, about $600,000 worth, and on the Davis aqueduct, about $300,000 worth, and enlarge Pineview Dam and Reservoir requiring an expenditure of about $1¼ million.

Chairman HAYDEN. Do you have a couple of small powerplants on the project?

Mr. NIELSEN. One at Wanship and one at Gateway; yes, sir.

Chairman HAYDEN. What are you going to do with that power?

Mr. NIELSEN. We will use it first, of course, for project purposes and whatever surplus there may be will have to be disposed of in the area, first to preference customers. In all probability it will be through wheeling.

Chairman HAYDEN. The total cost of this project is $63 million, and this will make about a third of the money or a little over a third. At the rate you are going, when are you going to finish the project?

Mr. NIELSEN. With the exception of drains, and Lost Creek and East Canyon Dams it will be completed in 1960. Drainage, you know, we have to live with, and meet the drainage problem as it arises.

Chairman HAYDEN. Do you find here, as most everywhere else, that drainage does follow irrigation?

Mr. NIELSEN. Yes, sir; and even in Arizona.

Chairman HAYDEN. Agreed.

CHIEF JOSEPH DAM PROJECT, FOSTER CREEK DIVISION, WASHINGTON

PROJECT DATA

AUTHORIZATION

By Public Law 540, 83d Congress, dated July 27, 1954.

LOCATION

The Foster Creek division is located adjacent to the Columbia River in north central Washington about midway between the Wenatchee and Okanogan Fruit Belts.

DESCRIPTION

The project will provide a full water supply for approximately 4,550 acres and supplemental water for an additional 1,130 acres of land. The Foster Creek division is comprised of three units. (1) The Blue Bottle unit will irrigate about 800 acres of land by pumping from Rufus Woods Lake above Chief Joseph Dam. (2) The Bridgeport Bar unit is located along the south bank of the Columbia River below Chief Joseph Dam and includes about 1,750 acres. It will be supplied by a gravity diversion from the left abutment of Chief Joseph Dam. (3) The Brewster Flat unit with irrigable acreage of about 3,130 acres lies west of the Okanogan River near its junction with the Columbia. This unit is to be supplied by pumping from the Columbia River below Chief Joseph Dam.

STATUS

Construction has not been started. Assembly of design data will be accomplished during fiscal year 1955 and fiscal year 1956. Activities during fiscal year 1955 will include detailed preconstruction studies and investigations leading to a definite plan report, field location and assembly of design data for those features scheduled for construction commencing in fiscal year 1956. The fiscal year 1955 preconstruction work will be financed wholly from general investigation funds.

REPAYMENT

The Authorization Act provides for a repayment period of 50 years exclusive of a development period with a condition that all construction charges which are beyond the ability of the irrigators to repay shall be returnable from net power revenues from Chief Joseph Dam project. The project cost, including an allocation to irrigation in Chief Joseph Dam of $40,800 is $4,798,000. It is estimated that irrigators can pay $1,722,000 which will leave a balance of $3,076,000 to be returned from net power revenue. This assistance can be provided by the use of 1 year's net power revenue after payment of the Chief Joseph Dam project cost in the 50-year amortization period. Discussion with landowners will be commenced during fiscal year 1955 with the object of completing repayment contracts prior to initiation of construction in fiscal year 1956.

Amount to be repaid and repayment period

	Amount	Repayment period		Total
		Regular	Development	
Irrigation	$1,722,000	50	10	60
Power	3,076,000	1	0	1

Repayment of costs allocated to irrigation

Water users	$1,722,000
Power	3,076,000

Repayment costs per acre

Per acre	$845
To be repaid—	
From irrigators	303
From power revenues	542
Annual water users charges:	
Construction	6.06
Operation and maintenance	13.25
Total	19.31

Gross crop income per acre resulting from project irrigation: Estimated, $425.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1950; authorization, 1954; advance planning, fiscal year 1955.

Date of functional completion of construction, fiscal year 1958.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1956, $631,000.

Construction costs

Original estimated cost	$4,798,000
Allocation of cost: Irrigation	4,798,000
Total construction cost	4,446,000
Transitional development cost	311,200
Allocation from Corps of Engineers	40,800
Present estimated cost	4,798,000
Allocation of cost: Irrigation	4,798,000

Schedule of development

Irrigation system	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation acreage for service:				
Full				4,550
Supplemental				1,130
Total				5,680

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$4,615,802
Total obligations to June 30, 1954		
Total obligations, fiscal year 1955		
Allotment, fiscal year 1956	$631,000	
Total obligations, fiscal year 1956		631,000
Balance to complete		3,984,802

WORK PROPOSED, FISCAL YEAR 1956

The construction schedule described in the following paragraphs is tentative and subject to revision. Final decision as to the unit first to be placed under construction will depend on application of reclamation law and other controlling factors.

Blue Bottle Flat unit

Blue Bottle Flat pumping plant ($120,800).—Contracts are to be awarded during the fiscal year for pumps, motors, and other equipment and for pumping plant construction. Other designs, and engineering will be in progress. This work is scheduled so that irrigation water will be available at the start of the 1957 irrigation season.

North and south area canals ($52,100).—The contract for construction of the north and south area canals is scheduled for award during the last half of fiscal year 1956. Schedule allows for completion concurrently with the pumping plant in time for the 1957 irrigation season.

North and south area laterals ($65,300).—The contract for construction of these laterals is scheduled to commence during the second half of fiscal year 1956 with completion programed concurrently with the pumping plant and canals.

Blue Bottle Flat pumping plant transmission line and substation ($63,700).—Contracts for substation equipment and for construction of the transmission line and substation will be awarded during the fiscal year with completion scheduled in time to provide required power to the pumping plant when completed concurrently with the canals and laterals.

General property.—Procurement of operating equipment scheduled in fiscal year 1957.

Bridgeport Bar unit

Diversion Works—Chief Joseph Dam ($200).—Collection of design data will be initiated in order that construction may be started and completed in the following fiscal year.

Bridgeport Bar Canal ($29,000).—Collection of design data will be completed and specifications issued late in the fiscal year in order to permit construction and completion concurrently with other Bridgeport Bar facilities.

Bridgeport Bar lateral system ($12,800).—Collection of design data will be completed and specifications prepared for issuance early the following year. This work necessary to permit completion of laterals jointly with other Bridgeport Bar facilities.

General property.—Procurement of operating equipment scheduled in fiscal year 1958.

Brewster Flat unit

Brewster Flat pumping plant ($70,000).—Activities will include detailed preconstruction investigations, completion of design data and initiation of design looking toward award of construction contracts in fiscal year 1957. Brewster Flat is the last unit and preconstruction work must continue in fiscal year 1956 to permit completion of the division in 3-year period.

Brewster Flat canal ($22,000).—Detailed preconstruction investigations, will be continued, design data completed, and design work started. This facility to be constructed concurrently with the pumping plant and laterals.

Brewster Flat laterals ($40,000).—Detailed preconstruction investigations will be continued, and design work initiated leading to construction with other unit facilities.

Brewster Flat pumping plant transmission line and substation ($136,600).—Construction specifications will be prepared, a contract awarded, and contract earnings payments made. Early completion of this line is necessary to provide power during the construction period.

General property.—Procurement of operating equipment scheduled in fiscal year 1958.

Chairman HAYDEN. Next is the Chief Joseph Dam, the Foster Creek Division. That will cost $4,615,802, and you are asking for $631,000 for 1956.

Senator DWORSHAK. The main dam has been constructed by the Army engineers?

Mr. NIELSEN. That is right.

Senator DWORSHAK. And this is just the reclamation features?

Mr. NIELSEN. That is right. I have a comment I would like to give you, if I may, sir.

Chairman HAYDEN. Go ahead.

Mr. NIELSEN. Recent progress in the preliminary negotiations with prospective water users indicates that interest in complying with reclamation law, involving the establishment or irrigation districts, negotiation of repayment contracts, and other controlling factors, is developing more rapidly in the Bridgeport Bar and Brewster Flat units than in the Bluebottle Flat unit. Ownership problems on the latter unit and design considerations together with other factors on the Brewster Flat unit, further indicate that the Bridgeport Bar unit will be the most desirable unit for initial construction. Definite plan reports for Bridgeport Bar and Brewster Flats are expected in by June and September, respectively. This would permit scheduling construction in fiscal year 1956 on these two units.

Chairman HAYDEN. You are not going to go to work until you get your contracts?

Mr. NIELSEN. I would hope not there or anywhere else.

TOTAL NEW LAND

Senator DWORSHAK. How many acres of new land are you bringing in?

Mr. NIELSEN. A total of 5,600 acres.

Chairman HAYDEN. How much is the allocable cost per acre to be paid by the irrigators?

Mr. NIELSEN. Of $845 overall cost, the irrigator would pay $303.

Senator DWORSHAK. How would the rest be? Five hundred and forty-two dollars to be paid by power generated?

Mr. NIELSEN. Yes, sir.

Senator DWORSHAK. And the Army engineers are operating that?

Mr. NIELSEN. They will operate the dam; yes, sir.

COLUMBIA BASIN PROJECT, WASHINGTON

PROJECT DATA

AUTHORIZATION

Initially authorized by section 2, Rivers and Harbors Act of August 30, 1935 (49 Stat. 1028, 1039); authorized and reauthorized by Columbia Basin Project Act of March 10, 1943 (57 Stat. 14).

LOCATION

The project is located in the central part of the State of Washington, with its major feature, the Grand Coulee Dam, situated on the Columbia River approximately 95 miles west of Spokane, Wash. The project works and the area to be irrigated extend from Grand Coulee Dam southward for 125 miles to the vicinity of Pasco, Wash., near the confluence of the Columbia and Snake Rivers. The project area includes portions of Okanogan, Grant, Douglas, Adams, Franklin, and Walla Walla Counties.

DESCRIPTION

The project's irrigation facilities are designed under ultimate development to deliver water to 1,029,000 acres of new land. Power facilities have a total installed generating capacity rated at nearly 2 million kilowatts. The project's principal features include the Grand Coulee Dam, the right and left powerplants and adjoining switchyards, and the adjacent primary irrigation pumping plant, all located at Coulee Dam. Other primary irrigation works include the feeder canal, 26-mile equalizing reservoir; the main, west, east low and east high canals, served by releases from the equalizing reservoir; and the Potholes Canal system served from the Potholes Reservoir. Other irrigation works include laterals, drains, relift pumping plants, and other properties necessary to serve the new lands.

STATUS

The Grand Coulee Dam, powerplant, switchyards, primary pumping plant (6 units), and irrigation system headworks are functionally complete. First irrigation from the primary works commenced in 1952 with water available to 66,000 acres of the 624,000-acre total contemplated under the initial development phase of the program. Installation of presently authorized generating facilities was completed in 1951. No additions will be made to the primary pumping equipment until extension of the irrigation distribution system increases the water requirements beyond the capacity of the 6 presently installed 65,000-horsepower pump units. The North Dam and Dry Falls Dam which impound the water to form the 26-mile equalizing reservoir, are complete and deliveries from the equalizing reservoir through the main canal to the major canal system commenced in 1952. The 245 miles of major canals constructed to date include the west canal from the Frenchman Hills tunnel, east low canal through the fourth section, and the Potholes east canal through the fourth section. Work is now under way on the fifth section of both the west and the east low canals and on the Eltopia branch of the Potholes east canal. Construction on the distribution system, pumping plants, and related transmission facilities, drains, service

buildings, ditchrider and pump-operator quarters and other necessary facilities is completed to deliver water to approximately 186,000 acres. Nearly 1,000 miles of laterals have been constructed to date. Construction of facilities to serve another 61,000 acres is nearing completion with this additional acreage to be available for development in the spring of 1955. Much of the lateral construction for the 1956 program of 54,000 acres is underway and work on a portion of the 1957 laterals will also be placed under contract during the fiscal year. Operation and maintenance of facilities in development period, as well as the priming and puddling of facilities in the predevelopment testing period, will be continued. The settler assistance program, with no overlapping of functions with other agencies, and the purchase of settlement land have both been underway for a number of years and will continue. A feasibility report on the installation of additional generating equipment at Grand Coulee Dam has been completed. The general policy covering the delivery of municipal and industrial water has been developed and approved. The project, overall, will be approximately 64 percent complete by June 30, 1955.

REPAYMENT

Status of repayment contract: Repayment contracts were executed in 1945 with the three irrigation districts of the project. The contracts provide for the repayment of approximately $85 per acre. The contracts with the irrigation districts contain certain limitations on irrigation expenditures and on the water users repayment obligations, which are currently being reviewed with the district boards and others with a view to increasing the repayment obligations in light of current costs and economic conditions.

Project costs not covered by district repayment contracts and exclusive of a $1 million nonreimbursable allocation to flood control and navigation, will be repaid from commercial power and pumping power revenues. Electric power and energy in excess of project requirements is marketed by the Bonneville Power Administration. Repayment of project costs is being accomplished under a memorandum of understanding between BPA and the Bureau of Reclamation. In fiscal year 1953 a repayment of $11,100,000 was made by the BPA. In fiscal year 1954 this payment was increased to $12,535,000 and an annual revenue of this amount was assumed for future years to accomplish project repayment.

Amount to be repaid and repayment period (subject to revision following completion of repayment contract negotiations):

	Amount	Repayment period		Total
		Regular	Development	
Irrigation	[1] $87,465,000	40 years	10 years	50 years.
Power	[2] 664,295,560	1941 to 2024		[3].
Total	[4] 751,760,560			

[1] Excludes $1,800,000 estimated cost of special distribution systems for part-time farm units to be repaid by water users over a 10-year period.

[2] See the following:

Commercial power investment	$193,067,144
Assistance to irrigation	471,228,416
Total	664,295,560

[3] Construction costs allocated to commercial power will be repaid within 50 years from the date the individual facility becomes revenue producing. Overall project repayment will be accomplished in the 50-year period following application of water to the last blocks of land to be irrigated.

[4] See the following:

Total construction cost	$752,064,000
Settlers assistance program	2,810,000
Present estimated cost	754,874,000
Less:	
Flood control and navigation	1,000,000
Special distribution system	1,800,000
Contributions	313,440
	3,113,440
Total for repayment	751,760,560

Repayment costs allocated to irrigation

Water users	$87,465,000
From power revenues	[1] 471,228,416
Total	558,693,416

[1] Includes power facilities allocated to irrigation pumping.

Repayment costs per acre

Federal investment per acre	$543.00
To be repaid:	
From water users	85.00
From power revenues	458.00
Annual water user charges:	
Construction	[1] 2.12
Operations and maintenance	[2] 5.50
Total	7.62

[1] Repayment of construction costs for each irrigation block will begin at the end of its 10-year development period. First construction payments will become due in fiscal year 1958 from block 1.
[2] The annual charge of $5.50 to the water user covers the water allotment (which is the base quantity plus ½ acre-foot of supplemental water). Demand for water in excess of the water allotment will return an average of 25 cents per acre. Thus, the total operation and maintenance program is based on an estimated cost of $5.75 per acre. Actual collections will, of course, take into account the graduation of charges depending on the development year for each block in the development period.

Gross crop income per acre resulting from project irrigation (actual for calendar year 1953): $139.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1904; advance planning, 1933; construction, 1934.
Date of functional completion of construction: Work scheduled through 1961. Detailed program not available thereafter.

Construction costs

Original estimated cost	[1] $487,030,228
Allocation of cost: [2]	
Irrigation	341,929,994
Power	113,827,243
Downstream river regulation	30,272,991
Flood control and navigation	1,000,000
Present estimated cost, including settler assistance	754,874,000
Allocation of cost: [3]	
Irrigation	558,693,416
Power	193,067,144
Flood control and navigation	1,000,000
Part-time farm unit distribution system	1,800,000
Contributions (State of Washington)	313,440

[1] H. Doc. 172, 79th Cong., 1st sess. (based on estimated average prices as of January 1940).
[2] Made on alternative-justifiable-expenditure approach.
[3] No allocations are currently being made to downstream river regulation.

The total estimated cost of the Columbia Basin project has been revised during the past year from $740,056,000 (total anticipated obligation, $746,056,000) to $754,874,000, including settler asisstance (total anticipated obligations $760,874,000). The estimated cost of the last six 65,000-horsepower pumping units at the Grand Coulee pumping plant was increased significantly after the previous estimates were examined and compared with present-day prices. Lateral lining requirements were increased substantially in blocks 89 and 92 and, to a lesser extent, in blocks 17, 18, 19, 20, and 83. Additional lining requirements also increased the estimates on the Potholes east canal. A general 5 percent increase was applied to the relift pump plants to reflect the 1953–54 pricing trend. A reanalysis of the project needs for future irrigation operating facilities resulted in a reduction in the requirements for these facilities. Recent agreements with BPA effected an increase in the estimates to provide for a proportionate cost of power transformation at the BPA substations which serve project works. There were also changes reflecting an additional year's collection of new field data as well as the annual accumulation of overruns and underruns.

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (acres) full (cumulative)	186,000	247,000	301,000	1,029,000
Power (kilowatts)	1,974,000			1,974,000

Power rates: All power generated by the project for commercial use is sold by the Bonneville Power Administration. BPA annually deposits in the Treasury, funds to cover operation and maintenance, interest, replacements, and investment costs in accordance with the memorandum of understanding between BPA and the Bureau of Reclamation.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$760,874,000
Total obligations to June 30, 1954		472,978,386
Allotment, fiscal year 1955	$11,525,000	
Prior year balance available	233,000	
Total obligations, fiscal year 1955		11,758,000
Allotment, fiscal year 1956	$12,500,000	
Total obligations, fiscal year 1956		12,500,000
Balance to complete		263,637,614

Work proposed, fiscal year 1956

Grand Coulee Dam and Reservoir.—No funds required.

Other multipurpose plant facilities ($47,000).—For the construction of a sewage effluent treatment plant for the dam.

Primary irrigation works ($65,000).—This amount is for continued minor construction on the Soap Lake interception and convergence works, including engineering studies, and miscellaneous items on the main canal system.

West Canal irrigation area ($5,384,000).—Laterals and related facilities for 25,000 acres in blocks 86 and 87 will be completed and primed and water will be available to this land on a testing year basis in 1956. Construction will continue in block 89 on the Naylor siphon, W20 lateral, the distribution laterals and related facilities, including ditchrider and pump tender housing. Construction will be commenced on laterals and pumping plants for the portion of the 1958 acreages in blocks 77 and 79. A contract will be awarded to construct the Royal branch of the West Canal which extends westerly from the Frenchman Hills Tunnel to serve blocks 82, 83, 84, and 85. Necessary right of way will be procured and drainage and essential deferred and supplemental construction will be accomplished as the need develops.

East low canal irrigation area ($2,701,000).—Completion of construction, including ditchrider housing, will be under way in block 45, and priming and testing will be commenced for this 18,000-acre block which is to receive water for the first time in 1956. Work on laterals and related facilities to serve land in the 1957 program in blocks 18, 47, and 421 will be under way. Includes the necessary funds for rights of way, drainage, and supplemental construction.

Potholes irrigation area ($3,982,000).—Construction of laterals serving an area of 12,000 acres in block 19 will be completed and priming and testing of this system will be commenced. This area, which is a part of the released AEC Wahluke slope secondary zone, will be available for development late in the spring of 1956. The laterals to serve 1957 acreages in block 14 and the appurtenant pumping plant, transmission line and switchyard will also be completed. A contract for construction of the heavy structures on the Wahluke Canal will be awarded. Provision is also made for the required rights of way and for drainage.

East high canal irrigation area ($10,000).—For the continuation of system studies and reestimates in connection with the plan for construction of this irrigation area.

Pasco and Burbank pumping units ($26,000).—For completion of the lateral layout and for preparation of designs and specifications for the lateral system in block 3 near Burbank.

Other irrigation plant facilities ($92,000).—For additional heavy equipment for transportation, shops, stores, etc., required in operation of the project facilities.

Special distribution systems—part-time farm units.—No work required. Additional part-time farm unit facilities are not contemplated until fiscal year 1957.

Development farm units.—No funds required. Development farms have been constructed at Pasco, Moses Lake, Winchester, Burke, and Othello. The Pasco farm was sold during the last fiscal year and the sale of the Winchester and Moses Lake farms will be accomplished during the current year. A sixth farm has been a part of the project plan for some time but construction has been deferred.

Power facilities.—No funds required.

Project investigations ($15,000).—An economic study and evaluation of project benefits will be undertaken in fiscal year 1955 and be continued in fiscal year 1956. The study will probably require several years of progressive analyses to permit of valid evaluations. This amount includes $5,000 for participation by the staff of the State College of Washington.

Chairman HAYDEN. How is the Columbia Basin project going? You are asking for $12,500,000 to carry on. That will bring in how many acres of new land?

Mr. NIELSEN. Our new land is coming in at about the rate of 50,000 acres a year.

Chairman HAYDEN. Do you have any trouble getting settlers?

Mr. NIELSEN. No, sir.

Senator DWORSHAK. Are you using a lottery system to select your settlers for that new land?

Mr. MITCHELL. Yes; we are, on the lands that are owned by the United States.

Senator DWORSHAK. What percentage of the land is owned by the United States?

Mr. MITCHELL. Probably 10 percent.

Senator DWORSHAK. Ten percent? Ninety percent is already in private ownership, and has been prior to the initiation of the project?

Mr. MITCHELL. Yes, sir.

Chairman HAYDEN. I assume that land was patented under the homestead laws where they grew wheat?

Mr. MITCHELL. Yes, sir. Most of it was patented a good many years ago and is now in dry-land wheat production or is virgin land that has never been cultivated.

Senator DWORSHAK. Are any of those private owners in that area disposing of their land because they do not want to assume the larger obligations?

Mr. MITCHELL. Yes, there are some selling it. Others are developing their own lands and are coming into irrigation.

ACREAGE LIMITATION

Chairman HAYDEN. Does the 160-acre limitation apply there?

Mr. MITCHELL. On the Columbia Basin project, the limitation is by 1 farm unit, but the irrigable acreage in a farm unit does not exceed 160 acres. A family is limited to 1 farm unit.

Senator DWORSHAK. So that no matter how many members of a family were engaged in operating a specific unit, their total operation would not include more than 160 acres?

Mr. MITCHELL. That is right.

Chairman HAYDEN. Are you transferring settlers from some other projects to the Columbia Basin project?

Mr. MITCHELL. They have a right to go there, yes, sir, under the authorization, Public Law 258.

Chairman HAYDEN. Have there been many transfers from other parts?

Mr. MITCHELL. Not many. I would assume offhand there have been about a half dozen.

COST OF IRRIGATING LAND

Senator DWORSHAK. What is the total cost of irrigating that land now, bringing it into cultivation with the allocable share of the construction costs?

Mr. NIELSEN. The total investment is $543, as the Federal investment.

Senator DWORSHAK. $543?

Mr. NIELSEN. Yes, sir. Eighty-five dollars from the water users, and $458 from power revenues.

Senator DWORSHAK. Is that $85 rather small in comparison with the allocable repayment per acre on the other projects?

Mr. NIELSEN. Well, I would say it is rather fortuitous for those water users, yes, sir.

CHIEF JOSEPH ACRE COST

Senator DWORSHAK. You told us over on Chief Joseph they were obligated to repay about $300 per acre. What was the exact charge?

Mr. GOLZÉ. $303.

Senator DWORSHAK. Here it is only $85. That is quite a discrepancy.

Chairman HAYDEN. Is that price irrevocably fixed?

Mr. NIELSEN. Do you have the history of that Mr. Golzé? That was before my time.

Mr. GOLZÉ. I can tell you some of the background. The contracts with those irrigation districts were drafted during the war years, and were executed about the end of the war. They were tied to the then estimated cost of the project, which is considerably less than it is now, before inflation really set in. This repayment figure was based on an irrigation development cost estimated at approximately $290 million. The current cost estimate for the irrigation and drainage facilities is approximately $590 million as compared to the $290 million estimate on which the repayment contracts were based.

The Bureau of Reclamation has had some discussion with the irrigation districts about revising the repayment upward, but as yet nothing has materialized. As recently as April 18, 1955, the Commissioner addressed a letter to the Columbia Basin irrigation districts on the subject which we will supply for the record at this point.

(The letter referred to follows:)

UNITED STATES DEPARTMENT OF THE INTERIOR,
BUREAU OF RECLAMATION,
Washington, D. C., April 18, 1955.

BOARD OF DIRECTORS,
Quincy-Columbia Basin Irrigation District,
Quincy, Wash.
(Attention: Mr. Roy A. Huse, Secretary.)

GENTLEMEN: For several years Bureau of Reclamation officials have been cognizant of the ultimate need for amending the repayment contracts with the three Columbia Basin Irrigation Districts to increase prevailing expenditure limits for direct irrigation facilities and drainage works. As you know, existing contracts

between the districts and the United States place a limit of $280,782,180 on the obligation of the United States to expend money for direct irrigation facilities, and within that amount a limit of $8,176,000 for project drainage works. Both limits will be reached before project construction has been completed to serve the whole project as originally authorized. It is our belief that in the best long-range interest of the whole project, contract amendment should be accomplished now.

Periodically since January 1953, regional and project officials of the Bureau of Reclamation have discussed with the joint boards of directors of the three districts the impending problems with respect to construction expenditure limits and have advanced proposals for contract amendment which were thought to be fair and equitable to all concerned. We have reported to the Secretary of the Interior on the status of those negotiations, and recommended a basis for future negotiations which has been approved.

Based on that approval, the purpose of this letter is to submit for your consideration a framework within which we believe fair and equitable contract amendment can be worked out and to inform you that our forthcoming reports to the several congressional committees concerned with the Bureau of Reclamation's program will of necessity include an historical résumé of Columbia Basin project's rising construction costs, our proposed program for project completion, and our recommendation with respect to revision of contract limits on expenditures and water users' repayment obligation.

It is our understanding that early in January of 1954, officials of the several irrigation districts of the Columbia Basin project were supplied with copies of a proposal for revision of water users' reimbursable obligation. That proposal reviewed the repayment situation under the 1945 contracts, and the problem faced by reason of substantial increases in project construction costs on the one hand, and on the other a limit on the Government's expenditure obligation based on 1940 construction cost levels. When the 1945 contracts were negotiated, construction costs were estimated to total $487,030,228 based on average prices as of January 1940. Of this amount, $341,929,994 was allocated to irrigation, but only $87,465,000, or about 25 percent of the irrigation costs, was allocated to water users for repayment.

Since 1945, cost estimates for irrigation facilities have risen from about $342 million to nearly $560 million exclusive of any increase in drainage works costs. The estimated cost for direct irrigation facilities which is the limiting factor in the existing contracts has risen proportionately. This limit will be reached when only about 60 percent of the ultimate project acreage has been developed to receive irrigation water.

Equally important, or more so, to the water users is the 1945 contract limit of $8,176,000 on expenditures for drainage works—any costs in excess thereof to be met by direct assessment to water users as annual operation and maintenance charges. Since 1945, the drainage cost estimate has risen from $8,176,000 to about $40 million which means that all costs for drainage works after the present limit has been reached will of necessity be billed annually to water users unless contracts in this respect are modified. Recognizing that the bulk of drainage expenditures can be expected to occur during the first 10 to 20 years of project operation, drainage assessments alone under the present contracts could amount to several dollars an acre for a number of years. It would be to the water users' benefit to spread such costs over the full repayment period of the project and thereby avoid the necessity for successive drainage assessments over a comparatively short period.

In recent years the Congress of the United States has given its approval to amendatory repayment contracts for about 30 irrigation districts in the Pacific Northwest. Based on the pattern of those contracts, we believe an equitable increase in the water users' repayment obligation could be scheduled for repayment over an extended repayment period and thus avoid an increase in the annual construction installment. The increased requirement for drainage works might equitably be treated as construction rather than operation and maintenance costs and be spread over the full water user repayment period through a nominal annual charge in addition to the regular annual construction installment.

Certain other matters of vital concern to water users of the Columbia Basin project should be dealt with at the same time the expenditure limits are increased and the repayment provisions modified. Significant among these is the current limitation on farm unit ownership.

For your consideration and comment, we are proposing herein a basis for negotiation which appears reasonable and fair. We urge that you consider the several phases as component parts of a single "package" proposal. We propose that existing contracts with the Columbia Basin districts be amended (*a*) to

increase the permissible expenditure limits for direct irrigation facilities and drainage costs; (*b*) to increase the water users' reimbursable obligations; (*c*) to state the new obligation and expenditure limits in terms of amounts per acre with project totals being applicable only to the ultimate project of 1,029,000 acres; and (*d*) to extend the water users' repayment period beyond 40 years as necessary to recover the increased obligation with no increase in annual rates except to the extent the cost of drainage facilities in excess of $8,176,000 is added to capitalized project works costs for repayment over the extended water user repayment period. In addition to these proposals, consideration could be given to the inclusion in the amendatory contract of some reasonable modification of the present farm unit ownership limitation. Your views and proposals are invited with regard to what modifications of the ownership limitation would be desirable as a part of the "single package" proposal described above.

Our report to the appropriate congressional committees will be along the lines discussed herein. We will of necessity provide the committees with added detail on project costs, the allocation of costs as between purposes to be served, the allocation of costs for repayment purposes, and contract provisions. We, of course, cannot anticipate the reaction of the congressional committees, nor the action, if any, that those committees might recommend or require. In the meantime, however, we believe that negotiations for contract amendment along the lines outlined herein should be expedited.

Your comments will be appreciated. Similar letters on this matter are being sent to the boards of directors of the two other Columbia Basin districts.

Very truly yours,

W. A. DEXHEIMER, *Commissioner.*

COLUMBIA BASIN ARRANGEMENT

Senator DWORSHAK. Does it not embarrass the Reclamation Bureau of the Government to have such diversions such as $85 and $303 on projects which are side by side?

Mr. GOLZÉ. I think Mr. Nielsen correctly expressed it. The arrangement on the Columbia Basin is a fortunate one for the water users there.

Senator DWORSHAK. Who is paying the difference? If you expect a water user to repay $303 on the Foster project, and only $85 over on the Columbia Basin project, just a few miles distant, who is going to make up the difference?

Mr. NIELSEN. The power users make up the difference.

Senator DWORSHAK. The power users?

Mr. NIELSEN. That is right.

Senator DWORSHAK. In other words, the $458 per acre comes out of power revenues?

Mr. NIELSEN. It comes out of Grand Coulee power revenues; yes, sir.

Senator DWORSHAK. While we do not usually like to earmark it as subsidy for reclamation, it certainly is that, unless you operate under a basin account.

Mr. GOLZÉ. The tremendous amount of power revenues available at Grand Coulee is one reason for that low price.

Senator DWORSHAK. Are you not going to have power revenues available under Chief Joseph?

Mr. NIELSEN. It is not so good a power site. We are trying to negotiate with those Columbia Basin water users toward a higher repayment, more nearly in line with actual values.

Senator DWORSHAK. If the trend had been in reverse, I suppose they would be in here asking the Government to change the repayment contracts.

Mr. NIELSEN. I think that is a well-founded supposition.

LAND PRODUCTIVITY

Senator YOUNG. What is the relative productivity of the 2 pieces of land, the 2 projects?

Mr. NIELSEN. I would say the advantage lies a little bit with Foster Creek.

Mr. MITCHELL. It depends upon what part of the Columbia Basin you are talking about. But, overall, I would say yes, it probably does.

Senator DWORSHAK. That includes about a million acres eventually, does it not?

Mr. NIELSEN. Yes, sir; in the Columbia Basin project.

Chairman HAYDEN. Some of it is better land than other parts?

Mr. NIELSEN. Yes, sir.

Senator DWORSHAK. Is it not true that some of the land to be irrigated under the Chief Joseph project is virtually in the same area and the same texture of soil, involving the same farming operations?

Mr. NIELSEN. I indicated that I thought the advantage lay a little with Chief Joseph, but not particularly. It is not a great deal better except that a higher proportion of the land is expected to be devoted to the production of fruit.

Senator DWORSHAK. Is it not about the same kind of land, in the same area, where the same kind of crops can be grown?

Mr. NIELSEN. Essentially.

Senator DWORSHAK. Does that answer your question, Senator Young?

Senator YOUNG. Yes; it does.

YAKIMA PROJECT, KENNEWICK DIVISION, WASHINGTON

PROJECT DATA FOR CONSTRUCTION

AUTHORIZATION

By act of June 12, 1948 (62 Stat. 382).

LOCATION

South central Washington in Benton County directly above the confluence of the Yakima and Columbia Rivers. Division works extend from the diversion dam at Prosser, easterly a distance of about 40 miles to the village of Hover.

DESCRIPTION

The Kennewick division is the last division of the Yakima project being developed from the water resources of the Yakima River. The primary purpose of the division is to provide a full water supply to 19,171 acres of land, of which 14,534 acres are undeveloped rangelands and 4,637 acres are now irrigated by electric pumping from the Columbia Irrigation District's canal. These facilities are rapidly reaching the end of their usefulness. Under the project plan, the facilities constructed to serve the new lands would be enlarged and extended as necessary to serve the area now irrigated. Hydraulic pumping would be used in lieu of electric, thus reducing the annual operating cost. Project features also include a 12,000-kilowatt capacity hydroelectric powerplant.

STATUS

In the past year the total estimated construction cost has been increased from $12,838,000 to $13,202,000, exclusive of $506,057 storage costs. The net increase of $364,000 is due to various reasons—including refinement of estimates of contract

quantities, more detailed design work on complicated power and pump facilities and requirements for more elaborate fish facilities which have been partly offset by design changes in section 1 of the Chandler Canal resulting in saving of nearly $500,000. The first construction contract was awarded in January 1953, several major supply contracts for power and pumphouse equipment having been awarded a month previous. Construction under way, or completed by June 30, 1954, included: Section 2 of Chandler Canal, section 1 of Main Canal, Chandler power and pumping plant, a warehouse at Chandler, and various minor contracts. Fabrication of major pump and electrical equipment was under way in eastern factories. On a cost basis, the project was 34 percent complete at the end of fiscal year 1954, and will be about 70 percent complete on June 30, 1955. During fiscal year 1955 there will be activity on nearly all major features of the project—consisting of continued construction on Chandler power and pumping plant and switchyard and beginning construction on changes to Prosser Dam and to Chandler Canal, section 1, 25 miles of irrigation canal and Amon pump plant, and laterals and wasteway facilities. Preconstruction investigations and preparation of design data will be under way for the remaining canal and lateral features of the project.

REPAYMENT

An amendatory repayment contract was executed by the Secretary on July 22, 1953, covering payment of the construction costs allocated to irrigation for payment by the water users, and restating and redefining the water supply for the division. The Bonneville Power Administration will be the marketing agent for surplus power produced by the division. The annual financial requirement from the Kennewick division power, including amortization at 2½ percent, annual operating costs, and financial assistance to irrigation is $219,300. The administration has indicated adequate revenue will be available to meet this requirement. The authorization provided that the allocation to fish and wildlife will be nonreimbursable.

Amount to be repaid and repayment period

	Amount	Repayment period		Total
		Regular	Development	
		Years		*Years*
Irrigation	$4,887,900	66	(1)	66
Power	7,830,157	66	(2)	(2)

[1] No development period for old lands; 10-year development period for new lands is included in overall 66-year period.

[2] Commercial power investment repaid in 42 years (1997) after which power revenues will be used to provide financial assistance to irrigation and full repayment will be accomplished in the 66th year.

Repayment of costs allocated to irrigation

Water users		$4,887,900
Power:		
Direct	$3,609,730	
⅛ interest component [1]	442,427	
		4,052,157
Total		8,940,057

[1] The authorizing act of June 12, 1948 (62 Stat. 382, Public Law 629, 80th Cong., 2d sess.), provided that (sec. 3. (2)): "The return, within not exceeding sixty-six years from the date upon which each feature becomes revenue producing, of an appropriate share of the construction investment properly allocable by the Secretary to commercial power and energy together with interest on the unpaid balance at a rate of not less than 2½ per centum per annum * * *." (Sec. 5): "The power and energy revenues to be applied toward the fulfillment of the obligation to return that share of the investment found by the Secretary to be properly allocable to irrigation but assigned for return from net power and energy revenues may include one-fifth of the revenues derived from the interest component of power rates in addition to any and all sums otherwise assigned for such purposes from power revenues.

Repayment costs per acre

Federal investment per acre	$466.00
To be repaid—	
From water users	255.00
From power revenues	211.00
Annual water users charges:	
Construction	4.48
Operation and maintenance	5.15
Total	9.63

Gross income per acre resulting from project irrigation: $180 estimated.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1903; advance planning, 1948; construction, 1952.

Date of functional completion of project: Fiscal year 1957.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1953, $1,500,000.

Construction costs

Original estimated cost	[1] $10,736,000
Allocation of cost:	
Irrigation	8,339,000
Power	1,692,000
Fish and wildlife	705,000
Present estimated cost	[2] 13,760,057
Allocation of cost:	
Irrigation	8,940,057
Power	3,778,000
Fish and wildlife	1,042,000

[1] Includes $613,000 storage cost.

[2] See the following:

Total construction cost	$13,202,000
Settlers assistance	52,000
Storage	506,057
Present estimated cost	13,760,057

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation system:				
Irrigable acreage for service:				
Full			6,779	16,434
Supplemental [1]				4,637
Total			6,779	19,171
Power (kilowatts) [2]	2,400	2,400	12,000	12,000
Power rates (mills per kilowatt-hour):				
Irrigation pumping	2.75	2.75	[3]	[3]
Nonfirm (average)	2.50	2.50	[3]	[3]

[1] The Bureau reconstructed part of the system serving these lands in the early 1930's. These lands will now be served by the system to be constructed to serve the new land in the division.

[2] Prosser powerplant (2,400 kilowatts) will be dismantled in favor of Chandler powerplant (12,000 kilowatts).

[3] It is anticipated that commercial power will be marketed by the Bonneville Power Administration. The revenue reimbursement will be an amount to cover annual operating expenses and the return of costs to be borne by power.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$12,969,017
Total obligations to June 30, 1954		4,876,909
Allotment, fiscal year 1955	$4,000,000	
Prior year balance available	96,139	
Total obligations, fiscal year 1955		4,096,139
Allotment, fiscal year 1956	$3,000,000	
Total obligations, fiscal year 1956		3,000,000
Balance to complete		995,969

Work proposed, fiscal year 1956

Prosser diversion dam and headworks ($57,339).—Construction will be completed with progress payments to be made under the construction contract awarded in fiscal year 1955.

Chandler pumping plant ($275,627).—Construction will be completed with progress payments to be made under the prime contract awarded in fiscal year 1954 and the completion contract awarded in fiscal year 1955. Funds are also required to complete procurement of miscellaneous equipment and supplies required under the construction contracts completing this year.

Amon pumping plant ($164,000).—Progress payents will continue on the prime contract awarded in fiscal year 1955 and work will be started on a new contract to be awarded late in fiscal year 1956 for completion of the discharge line. Funds are also required for completion of payment to the pump-and-turbine supplier under a contract already in effect and for additional minor equipment and material required to support the prime contract.

Chandler Canal ($76,348).—Funds are required for continued progress payments under a contract awarded in fiscal year 1955 for enlargement of the upper 2.3 miles of this canal and for minor completion work on both sections of this canal. This canal is used for the power and pumping facilities and is scheduled for completion in line with the initial date for power generation.

Irrigation canal and wasteways ($1,185,266).—Construction will be completed under contracts awarded in fiscal year 1955 calling for construction of 23.1 miles of canal and a 4-mile-long wasteway. Progress payments will continue on an additional contract awarded in fiscal year 1955 for construction of 18.5 miles of canal and a wasteway. Funds are also required for the initial priming, puddling, and testing operations which will start in the spring of 1956.

Laterals ($593,116).—These funds will complete contracts awarded in fiscal year 1955 for construction of laterals serving 13,316 acres. Priming, puddling, and testing will be completed on laterals serving 6,779 acres. Progress payments will also be made on contracts initiating construction of laterals serving the remaining 5,855 acres.

Drains and observation wells ($4,000).—These funds will provide for preconstruction work on the drainage system as required.

Chandler powerplant and switchyard ($381,745).—These features will be completed, with funds utilized for payment of existing contracts for generators and construction work. Funds are also required to complete other supporting construction and supply contracts under the major construction contracts. Initial power is scheduled for September 1955.

Warehouse, residences and telephone system ($65,616).—Progress payments made on the contracts already in effect will complete the residences and utilities at Chandler power and pumping plant. Funds are also required to initiate a contract for construction of a residence at Amon pumping plant and wasteway. Telephone facilities will also be completed for the Chandler and Amon sites.

Wildlife fence, fish screens and ladders, river improvements ($155,802).—Progress payments on contracts awarded in fiscal year 1955 covering construction of the fish screens and ladders will complete this work. Channel-improvement work in the Yakima River to confine low flows will be started upon operation of the Chandler Canal in September 1955.

Operation and maintenance equipment ($20,000).—Procurement of the initial equipment and work tools required for the irrigation operation and maintenance program is being accomplished during the last years of construction to take advantage of economical purchases of good equipment that may be available on surplus and transfer lists from all agencies.

Chairman HAYDEN. The next project is the Kennewick Division of the Yakima project. How are you getting along there?

Mr. NIELSEN. Pretty well, sir. This year we propose to complete construction on the Chandler pumping plant.

Chairman HAYDEN. You will not have much else left to do then, will you?

Mr. NIELSEN. We have a considerable amount of work to do on the irrigation canals and wasteways, and on laterals, and the Chandler powerplant switchyard.

COST PER ACRE

Chairman HAYDEN. While we are talking about costs, what is the cost going to be in this case, per acre?

Mr. NIELSEN. $466, of which the water users will repay $255, and from power revenues $211.

Chairman HAYDEN. Yakima is a very old project; is it not?

Mr. NIELSEN. Yes, sir. The Kennewick Division, however, is not.

Chairman HAYDEN. What was the occasion for the new division that was not included in the original project?

Mr. NIELSEN. It is an extension of the original project.

Chairman HAYDEN. Yakima was one of the first built. I am trying to find why we are only getting at it now.

Mr. NIELSEN. The Atomic Energy Commission took over a very considerable parcel of land in lower Yakima Valley.

Chairman HAYDEN. That is the point I wanted to get to. On account of the Atomic Energy taking a considerable portion of the land, we are substituting that area for it. The water supply remains about the same.

Mr. NIELSEN. That is right, sir.

YAKIMA PROJECT, ROZA DIVISION, WASHINGTON

PROJECT DATA FOR CONSTRUCTION

AUTHORIZATION

On November 6, 1935, the President approved a finding of feasibility submitted by the Secretary of the Interior under the provisions of the Fact Finders Act of December 5, 1924 (43 Stat. 672, 702).

LOCATION

South-central Washington in Yakima and Benton Counties. Roza division extends southeasterly from a point 8 miles north of Yakima to 15 miles east of Prosser, a total distance of about 70 miles.

DESCRIPTION

The primary purpose of the Roza division is to provide full water supply for irrigation of 72,000 acres (45,000 acres by gravity flow and 27,000 acres by pumping) of semiarid land lying in a long narrow strip on the eastern slope of the Cascade Mountains in the south-central section of the State. Constructed facilities of the division include the Roza diversion dam, 95 miles of main canal, lateral distribution systems, 7 wasteways, and 17 major pumping plants. The power system includes the Roza switchyard, 62 miles of 34.5-kilovolts, transmission line serving the pumping plants and the proposed 11,250-kilowatt Roza powerplant. (Prior to the construction of the powerplant, pumping power is being secured from the Bonneville Power Administration.) A water-supply contract calls for annual delivery of 375,000 acre-feet to the extent that such delivery can be made out of the available natural flow and existing storage facilities of the Yakima project. The first 11 miles of the main canal was designed and built

with sufficient capacity to deliver 2,200 cubic feet per second, of water, including 965 cubic feet per second, of water to serve the proposed powerplant.

STATUS

The total estimated construction cost of the Roza Division, which excludes the cost of reservoirs, has been increased from $21,791,343 to $21,858,735 (estimated total obligations $22,172,147). The increase results almost entirely from adjusting the estimated cost of the Roza powerplant to January 1955 price levels.

Construction began on January 28, 1936. As of June 30, 1955, the division will be approximately 88 percent complete—practically the only remaining work being the construction of the powerplant and activity on the drainage system including the construction of additional drains and investigations to determine the degree to which the Roza Division should participate in the construction of drains which would benefit both project and nonproject lands.

REPAYMENT

Costs to be repaid by the Roza irrigation district are covered by an amendatory repayment contract, executed on August 4, 1954.

Repayment of costs to be returned by power are dependent upon construction of the Roza powerplant. Included in costs to be borne by power are: (1) Roza powerplant, $2,913,000; (2) transmission facilities, $894,160; (3) excess Roza Canal capacity, $1 million; and (4) financial assistance to irrigation, $1,137,818.

Amount to be repaid and repayment period

	Amount	Repayment period (years)		
		Regular	Development	Total
Irrigation	[1] $19,228,100	[2] 64	10	74
Power	[3] 5,944,978	[2] 55	0	55
Other	[4] 85,362			
Total	25,258,440			

[1] Includes $2,500,000 storage cost.

[2] The amount of financial assistance to be provided by power and hence the length of the repayment period for irrigation and power was determined on the basis of studies in which each paid to the same terminal date. Irrigation contracts based on those studies provide for the return of a specific amount. In the meantime, the power operation has been reanalyzed in terms of current conditions and estimates of annual net power revenues have been increased from $92,077 to $112,400. As a consequence, the power payout period has been shortened in relation to that for irrigation.

[3] In addition to these costs, $19,406 interest during construction will be returned from power revenues.

[4] Cost of road crossings paid by counties, $79,540; advance supplemental construction payments, $5,822.

Repayment of costs allocated to irrigation

Water users	[1] $19,228,100
Power	1,137,818
Other	85,362
Total	20,451,280

[1] Consists of not to exceed $19,150,000 to be paid by Roza Irrigation District and $78,100 payable by other water users.

Repayment costs per acre

Federal investment per acre [1]	$284
To be repaid—	
From water users	267
From power revenue	16
From other payments	1
Annual water users charge:	
Construction	$4.10
Operation and maintenance	5.49
Total	[1] 9.59

[1] Includes storage costs.

Gross crop income per acre resulting from project irrigation (actual for calendar year 1953): $168.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1903; advance planning, 1936; construction, 1936.

Date of functional completion of construction-irrigation facilities now functionally complete. Principal remaining construction will be drainage and Roza powerplant.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1936, $1,000,000.

Construction costs

Original estimated cost (1935)	[1] $17,500,000
Allocation of cost (original): Unallocated	15,000,000
Present estimated cost	[2] 25,258,440
Allocation of cost (present):	
Irrigation	20,451,280
Power	4,807,160
Total	25,258,440

[1] Excludes $2,500,000 storage cost.

[2] See the following:

Total construction cost	$21,858,732
Storage	2,500,000
Funded operation and maintenance	779,100
Settlers assistance	120,608
Present estimate cost	25,258,440

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation system:				
Irrigable acreage for service:				
Full	72,000	72,000	72,000	72,000
Supplemental	0	0	0	0
Total	72,000	72,000	72,000	72,000
Power (kilowatts)	0	0	0	11,250
Power rates (mills per kilowatt-hour):				
Irrigation pumping				2.73
Nonfirm (average)				2.50

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$22,172,147
Total obligations to June 30, 1954		18,542,314
Allotment, fiscal year 1955	$79,000	
Prior year balance available	4,792	
Total obligations, fiscal year 1955		83,792
Allotment, fiscal year 1956	$75,000	
Total obligations, fiscal year 1956		75,000
Balance to complete		3,471,041

Work proposed, fiscal year 1956

Completed facilities.—Completed and placed in service in prior years.

Drainage system ($65,000).—Investigations and planning for a definite drainage plan on a projectwide basis will continue. Agreement to such a plan and a determination of the portion of the obligations to be assumed by each of the various drainage and irrigation districts, and other county organizations involved, will be sought. Construction of minor drainage facilities in areas requiring immediate relief is planned.

Roza powerplant.—No funds requested.

General property ($10,000).—Revisions to be made to a portion of the present warehouse to provide suitable office space for the Roza Irrigation District.

Chairman HAYDEN. There is some $75,000 on the Roza division, a very small sum.

I think, for the benefit of the record, you may include a statement about the cost of the Roza powerplant.

Mr. NIELSEN. There have been no funds requested for the Roza powerplant, sir. This $75,000 is principally investigations and planning for a drainage system. We can give you a statement on the powerplant if you would like.

Chairman HAYDEN. I would like to have it in the record.

Mr. NIELSEN. Yes, sir.

(The statement referred to follows:)

STATEMENT ON ROZA POWERPLANT, ROZA DIVISION, YAKIMA PROJECT

The very earliest engineering reports leading up the the original authorization of the Roza division of the Yakima project contemplated construction of a 10,000-kilowatt powerplant to be located at mile 10.9 on the main canal to utilize a 165-foot drop from the Roza main canal back to the Yakima River. The powerplant was incorporated in the original project plan primarily to provide pumping power to serve approximately 25,000 acres, located above the main canal, of the total project acreage of 72,000. This arrangement was provided for in an engineering report issued February 17, 1930, upon which the original repayment contract with the irrigation district was based as executed between the Yakima-Benton Irrigation District and the United States on December 13, 1935. Preliminary water filings by officials of the irrigation district, including those for the powerplant, were made prior to 1930.

The chief remaining uncompleted feature of the Roza division, outside of drainage works, is the Roza division powerplant. The United States has constructed various facilities to serve the Roza division of the Yakima project, including storage reservoirs, a diversion dam and canal headworks, the Roza Canal and wasteways, the Roza switchyard and substation, transmission lines, pumping plants and substations, laterals, sublaterals and appurtenant and incidental facilities. Continuing studies of the proposed powerplant have indicated that the canal capacity as constructed is adequate to supply a somewhat larger plant than originally planned. Current plans therefore propose a 11,250-kilowatt powerplant to consist of two 5,625-kilowatt generating units.

In accordance with the original repayment contract and with the original project plan, a diversion dam, 10.9 miles of main canal, wasteway No. 2 headworks structure, and tailrace to the Yakima River were all designed and built to provide capacity for the future installation of the powerplant, and the present investment in power canal capacity alone is approximately $1 million.

Two-thirds of the output of the proposed powerplant will be used to supply pumping power for use on the Roza division and the balance will be allocated and marketed as commercial power. At the time the main canal was constructed down to the location of the powerplant at wasteway No. 2, an additional investment was made to provide for power in the canal capacity which was in the late thirties prior to the outbreak of World War II. The decision was made with the concurrence of the irrigation district board that expenditures would be concentrated on the completion of the gravity canal and distribution system so that construction of the powerplant was deferred at that time. Following the outbreak of World War II, construction of the irrigation facilities of the Roza division was pushed to completion as a war food project, but due to scarcity of critical materials the powerplant was again deferred with the result that the entire irrigation system, exclusive of drainage but including all of the project pumping plants and associated substations and transmission facilities, was completed.

It is in the best interests of the water users and the United States that the powerplant be completed as soon as possible. First, to recover the total investment of some $3,031,978 which has already been invested in power canal and other costs and which are assigned for repayment from the powerplant. Prior to the availability of project power, irrigation pumps are being supplied from the system of the Bonneville Power Administration at a delivered cost of .5 of a mill higher than will be the case when the plant is completed. Finally, completion of the powerplant will furnish to the irrigation district a guaranteed and independent source of pumping power at a rate of approximately 2.75 mills per kilowatt-hour,

which rate will cover all operating costs of the transmission facilities, including transmission losses and part of the cost of operating the diversion dam, headworks and canal. Under the new BPA rate schedule effective December 20, 1954, the rate for power purchased from BPA for the district's pumps has been estimated to average 2.35 mills per kilowatt-hour at the points (Grandview and Roza substations) where the Bonneville power enters the project's 70-odd-mile transmission line. In addition, the district is obligated to pay operating costs and transmission losses on the project transmission facilities. Also, the district pays all the operation and maintenance costs of the diversion dam, headworks and canal, part of which will ultimately be jointly used for irrigation and power. This results in a present delivered cost of 3.25 mills per kilowatt-hour. After the cost of the powerplant is completely paid out, the district will receive pumping power at essentially the cost of operation and maintenance and replacements which would be considerably less than 2.75 mills.

An amendatory repayment contract (14–06–W–69, July 22, 1953) between the United States and the Roza Irrigation District provides for the repayment by the district of the cost of most of the facilities built to serve the district. In the course of negotiations prior to the signing of this contract, it was assumed that the Roza powerplant would be constructed by the United States and certain project costs were assigned for repayment from power revenues. The costs assigned for repayment from power revenues under article 8 (c) of the contract are:

(1) The cost of the Roza powerplant.
(2) $1 million of the cost of the Roza Canal.
(3) The cost of pumping plant transmission facilities.
(4) $1,137,818 of the estimated cost of irrigation works.

The present estimate of the cost of the Roza powerplant is $2,913,000 and the estimated cost of transmission facilities to serve the district's pumps is $894,160.

Items (2), (3), and (4) above totaling $3,031,978 are costs which have already been incurred and which will not be returned to the United States except by construction of the Roza powerplant. It is currently estimated that the Roza powerplant could be constructed and placed in operation in approximately 3 years.

Chairman HAYDEN. Did you ask the Bureau of the Budget for money for the Roza powerplant?

Mr. NIELSEN. Yes, sir.

Chairman HAYDEN. But it was denied by the Bureau?

Mr. GOLZÉ. Yes, sir.

EDEN PROJECT, WYOMING

PROJECT DATA

AUTHORIZATION

Originally under Appropriation Act of 1940 (53 Stat. 685). Changed to WCU project (53 Stat. 1418). Reauthorized June 28, 1949 (Public Law 132, 81st Cong., 1st sess.).

LOCATION

Southwestern Wyoming in Sweetwater County. Project area surrounds communities of Eden and Farson, Wyo.

DESCRIPTION

Consists of an earth-fill dam, a 39,700 acre-foot reservoir, a 500 foot diversion dam, 20.2 miles of canal, and a lateral and drainage system to serve 20,200 acres of land.

STATUS

The total project cost estimate has been decreased from $7,291,000 to $7,268,569 (anticipated total obligations $7,368,125). This decrease reflects costs of completed work and actual bid prices.

On June 20, 1954, the project was 59 percent complete. By the end of fiscal year 1955, the project will be approximately 69 percent complete.

REPAYMENT

A contract was executed on June 8, 1950, with the Eden Valley Irrigation and Drainage District consistent with Public Law 132, 81st Congress, 1st session, authorizing completion of the Eden project. This law further provides that construction costs of the irrigation features of the project which are not reimbursable by the water users will be repaid from net revenues derived from the sale of power generated at hydroelectric plants of the proposed Colorado River storage project in the upper basin when such plants are authorized and constructed.

Amount to be repaid and repayment period

Irrigation	$1,500,000
Repayment period:	
Regular	1962 to 2025
Development	7 years
Total	67 years

(Sixty years plus development periods of 4 years for old lands and 7 years for new lands.)

Repayment costs allocated to irrigation

Water users	$1,500,000
Power revenues	[1] 5,768,569
Total	7,268,569

[1] Pursuant to act of June 28, 1949, costs in excess of $1,500,000 to be returned from power revenues of proposed Colorado River storage project.

Repayment costs per acre

Federal investment per acre	$360
To be repaid—	
From water users	75
From power revenues	285
Annual water user charges:	
Construction	1.25
Operation and maintenance	2.00
Total	3.25

Gross crop income per acre resulting from project irrigation: $30.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1937; advance planning, 1941; construction, 1941 (WCU).

Date of functional completion of construction: Fiscal year 1958.

Fiscal year and amount of initial allotment of appropriation for construction: Fiscal year 1941, $1,154,595 from WCU funds.

Construction costs

Original estimated cost	$2,045,000
Allocation of cost: Irrigation	2,045,000
Present estimated construction cost	7,268,569
Transitional development	35,000
Total	7,303,569
Allocation of cost: Irrigation	7,303,569

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (acres):				
Irrigation acreage for Service: Full			4,500	20,200
Total			4,500	20,200

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$7,368,125
Total obligations to June 30, 1954		4,296,582
Allotment, fiscal year 1955	$700,000	
Prior year balance available	104,731	
Total obligations, fiscal year 1955		804,731
Allotment, fiscal year 1956	800,000	
Total obligations, fiscal year 1956		800,000
Balance to complete		1,466,812

Work proposed, fiscal year 1956:

Big Sandy Dam and Reservoir.—Feature completed.

Little Sandy Diversion Dam ($10,933).—The collection of design data and preparation of designs and specifications will be completed. Specifications will be issued for award of construction contract early in fiscal year 1957. This feature will be necessary to utilize Little Sandy Creek water as new lands are developed.

Means Canal.—Feature completed.

Little Sandy Canal ($10,683).—To be awarded on same contract as Little Sandy diversion dam and is part of same water carriage system.

Eden Canal rehabilitation and enlargement ($15,963).—Construction work will be completed in fiscal year 1955. Funds are requested for final report and testing and seasoning canal.

Farson area laterals ($128,321).—The preparation of designs and specifications, issuance of specifications and acquisition of necessary land and rights are scheduled in fiscal year 1956, with award of construction contract early in fiscal year 1957. Construction is scheduled to allow for orderly transition from the existing lateral system to the rehabilitated and extended lateral system.

Eden area laterals ($376,500).—Construction on the second section of Eden area laterals is scheduled through fiscal year 1956. Funds requested will be needed for contract payments and supporting activities.

West side laterals ($172,000).—Payments under the prime contract awarded in fiscal year 1955 will continue to completion through the first half of fiscal year 1956. Completion as scheduled will allow orderly development of farm units by the Department of Agriculture.

Farson area drains ($92,630).—Funds requested are required to complete the collection of design data, prepare designs and specifications, issue specifications and secure necessary right-of-way. Award will be made early in fiscal year 1957 simultaneously with Farson area laterals.

Eden and Sandy area drains ($44,801).—Construction under prime contract is scheduled through fiscal year 1956. Funds are requested for contract payments and contract administration.

West side drains ($10,000).—Programed activities provide for the collection of designs and specifications, and issuance of specifications.

Chairman HAYDEN. The next is the Eden project in Wyoming, which will cost $7,368,000, with $5,100,000 having been spent, and you are asking for $800,000 this year. What is that money for?

Mr. NIELSEN. That is principally for canals and laterals, sir.

Chairman HAYDEN. At the rate you are going, when were you going to complete the project?

Mr. NIELSEN. In fiscal year 1958.

Chairman HAYDEN. 1958?

Mr. NIELSEN. Yes, sir.

Chairman HAYDEN. Are there any public lands there that are going to be subject to drawing?

Mr. MITCHELL. Yes, there are public lands there, but those are under the jurisdiction of the Department of Agriculture. This was a WCU project, and the land settlement program is under the Department of Agriculture.

Chairman HAYDEN. Does that mean that there will be no veterans preference?

Mr. MITCHELL. They have veterans preference, yes, sir; but it is not operated under the Bureau of Reclamation's authority. It is under the Department of Agriculture, and handled by the Soil Conservation Service.

Chairman HAYDEN. This is something a little bit different than anything I have heard of before. The Reclamation Service does the work for the Department of Agriculture.

Mr. NIELSEN. This was a WCU project, sir. If you will remember back in those days we did the construction work principally, and the Department of Agriculture was doing the settlement job. It is different from the ordinary reclamation projects.

TOTAL IRRIGABLE LAND

Chairman HAYDEN. How many acres of irrigable land will there be on the project?

Mr. NIELSEN. About 20,000 acres.

Chairman HAYDEN. And some of that has not been brought under cultivation or under settlement as yet?

Mr. NIELSEN. That is right.

Chairman HAYDEN. Is this the only project of that kind where the Reclamation Service has the same relationship with the Department of Agriculture?

Mr. MITCHELL. No, sir. The Mirage Flats project in Nebraska, the Angostura project in South Dakota, the Buford-Trenton—those three are completed. In addition there are several more in Colorado, Utah, and Montana.

Senator DWORSHAK. Are any of the GI settlers leaving this Eden project to relocate in Arizona, Idaho, or elsewhere?

Mr. MITCHELL. No, sir. They do not come under this authority that we were discussing a while ago.

Senator DWORSHAK. Are some of the veterans in Wyoming relocating on this project, or will they?

Mr. MITCHELL. No, sir.

Senator DWORSHAK. Why not?

Mr. MITCHELL. That land is not subject to the authorization covered by Public Law 258.

Senator DWORSHAK. Why would you make that exception and permit them to relocate in Arizona and Idaho but not to leave one project in Wyoming and relocate in another in the same State? Was that part of the act?

Mr. MITCHELL. Under the bill that was passed, the exchanges were authorized and limited to Bureau of Reclamation projects.

Senator DWORSHAK. Why does this not qualify for that exchange?

Mr. MITCHELL. Because this operates under the old WCU authority whereby the settlement program is under the Department of Agriculture.

Senator DWORSHAK. That probably was overlooked when the authorization legislation was enacted.

Mr. MITCHELL. It may have been.

Senator DWORSHAK. Deliberately or otherwise.

Chairman HAYDEN. Probably not deliberately, but certainly otherwise.

KENDRICK PROJECT, WYOMING

PROJECT DATA

AUTHORIZATION

Authorized by finding of feasibility approved by the President August 30, 1935, under the provisions of the Fact Finders' Act of December 5, 1924 (43 Stat. 672, 702).

LOCATION

Located principally in Natrona and Carbon Counties, Wyo.

DESCRIPTION

The four major construction features comprising the project are: (1) Seminoe Dam and powerplant located approximately 55 miles southwest of Casper, Wyo.; (2) Alcova Dam and appurtenant structures located at Alcova, Wyo.; (3) Casper Canal and lateral system which will carry water for irrigating lands lying in a semicircular area southwest, west and north of Casper, Wyo.; and (4) transmission lines and substations to distribute power generated at Seminoe Dam and Alcova powerplant to central and southern Wyoming, western Nebraska, and northern Colorado.

The Seminoe powerplant consisting of three 10,800-kilowatt generating units which has been in operation since August 1939.

The Alcova powerplant will have an installed capacity of 36,000 kilowatts, consisting of two 18,000-kilowatt units.

STATUS

Construction began during 1933 under the name Casper-Alcova project. As of June 30, 1954, the project will be 94 percent complete. Water deliveries to farms began in the spring of 1946. By June 30, 1955, about 12,500 acres of the first unit will be under cultivation. All major features of the project will be functionally complete and in operation by the end of the current fiscal year.

Current work on the project consists of lining of canals and laterals and construction of drains as required by progress of land settlement and seepage losses, construction of the Alcova powerplant and installation of equipment, installing the transformer bank addition at the Casper substation, and construction of an additional 34.5 kilovolt bay at Bairoil substation.

REPAYMENT

The existing repayment contract with the irrigation district, dated May 25, 1935, was based on 35,000 acres of irrigable land and assumed repayment ability of $2 per acre. A reclassification of the project lands has reduced the irrigable acreage to about 22,000 acres. An economic analysis of repayment ability places that ability at about $1 per acre. Negotiation of an amendatory contract is under way. The balance of the construction costs of this project will be paid from the revenues from the sale of electrical energy in accordance with provisions of reclamation law.

Status of repayment contract negotiations.—Amendatory repayment contract being negotiated.

Amount proposed to be repaid and repayment period

	Amount	Repayment period		Total
		Regular	Development	
Irrigation	[1] $796,680	40 years	5 years	45 years.
Power	[2] 30,285,835	1940–2020	0 years	([2]).

[1] Amount shown and payout period based on proposed terms of amendatory repayment contract being negotiated.

[2] Construction costs allocated to commercial power ($16,086,519) are scheduled to be repaid within 50 years from date individual facility becomes revenue producing. Irrigation costs ($14,199,316) assigned for repayment from power revenues are scheduled for repayment by the year 2020.

Repayment of costs allocated to irrigation

Water users	$796,680
Power: Direct	14,199,316
Total	[1] 14,995,996

Repayment costs per acre

Federal investment, per acre	$678.00
To be repaid:	
From water users	[1] 36.00
From power revenue	642.00
Annual water user charges:	
Construction	[1] .90
Operation and maintenance	2.20
Total	3.10

[1] Based on proposed amendatory repayment contract.

Gross crop income per acre resulting from project irrigation (estimated for mature stage of development): $50.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1904; advanced planning, 1933; construction, 1933.
Date of functional completion of construction: fiscal year 1960.
Fiscal year and amount of initial allotment of appropriations for construction, initiated under provisions of the National Industrial Recovery Act of 1933, fiscal year 1934, $12 million.

Construction costs

Original estimated cost (first unit only)	$20,004,000
Allocation of cost: Unallocated	20,004,000
Present estimated construction cost	[1] 32,198,315
Allocation of cost:	
Irrigation	14,995,996
Power	16,086,519
Downstream benefit to and payable by Kortes unit, Missouri River Basin project	1,115,800

[1] Includes $164,364 settler assistance costs and $627,187 future year capacity provisions.

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
IRRIGATION SYSTEM				
Irrigable acreage for service: Full	22,128	22,128	22,128	22,128
Total	22,128	22,128	22,128	22,128
Power (kilowatts)	32,400	68,400	68,400	68,400

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$33,396,533
Total obligations to June 30, 1954		31,177,533
Allotment, fiscal year 1955	$730,000	
Prior year balance available	50,000	
Total obligations, fiscal year 1955		780,000
Allotment, fiscal year 1956	$750,000	
Total obligations, fiscal year 1956		750,000
Balance to complete		689,000

Work proposed, fiscal year 1956

Completed features.—Facilities completed in prior years and now in use.

Canal system ($63,000).—This amount will provide for contract stabilization and gravel blanket of 3,000 feet of prism on the Casper Canal and allow in addition about $21,000 for miscellaneous canal construction by Government forces. This work is required to prevent seepage.

Lateral system ($111,000).—To provide for continuing placement of asphalt membrane and compacted lay lining in main and secondary laterals and wasteway. Work to be generally accomplished by contract with isolated corrective work by Government forces. This lining work necessary to protect productive land from seepage, to conserve water, to fulfill increasing demands and to encourage development of unused capacity leading to earliest possible project completion.

Drainage system ($202,628).—This amount will provide about $45,000 for miscellaneous drainage work by Government forces. The amount of $71,920 is tentatively scheduled for excavation of 2 new drains totaling 14,913 lineal feet, and about $80,000 is similarly scheduled on a tentative basis to cover comprehensive drainage investigations and indirect expense connected with the overall program. Status of present investigations indicates that funds in excess of $45,000 may not be required. All drainage work is directed toward the elimination of excess seepage now being experienced.

Alcova powerplant.—Construction activity completed at the close of fiscal year 1955.

Seminoe-Casper 115-kilovolt transmission line and related substations ($280,613).—This amount will provide for electrical equipment and contract construction of additional 115-kilovolt bays for the Casper substation required for the second Alcova-Gering transmission line, and is scheduled for completion by June 30, 1956.

Seminoe-Bairoil 34.5-kilovolt transmission line and related substations ($35,000).—This amount will provide for continuation of contract construction of additions to the Bairoil Substation, 1,500 kilovolt-amperes, which will be initiated late in fiscal year 1955 and is scheduled for completion early in fiscal year 1957. The Bairoil Substation additions are required to serve REA's in the area.

General property ($12,387).—This will provide for additional radio communications equipment for the Kendrick irrigation system and force account installation, and for miscellaneous minor additions to the carrier current and telemetering system of Kendrick power facilities.

Chairman HAYDEN. The Kendrick project is next. You are asking for $750,000. When is that project going to be completed? It is an old one.

Mr. NIELSEN. That is scheduled for completion in 1960. But I think I might tell the committee we want to take a look at that project because it has some problems arising in good measure out of the 160-acre limitation. That area just does not lend itself to profitable farming under the 160-acre limitation.

Chairman HAYDEN. Is that due to the short growing season?

Mr. NIELSEN. The short growing season, the character of the land, and the economy of the area, which is principally livestock. We think it might possibly lend itself to a forage-crop economy geared in to the livestock range up there and perhaps we should waive the 160-acre limitation for a more economical operation.

Chairman HAYDEN. What limit would you put it at?

Mr. NIELSEN. We have not studied it to that extent.

Chairman HAYDEN. I think it would be well for you, if you do have any information in that regard, to put some statement in the record about it.

Mr. NIELSEN. We will be glad to prepare a statement on Kendrick as we see it in these early stages of restudy now; yes, sir.

Chairman HAYDEN. You do not want to express a final opinion at this time?

Mr. NIELSEN. No, sir. We have just talked about it among ourselves and have come to no definite conclusions so far.

Chairman HAYDEN. It would be a matter for a legislative committee. We had better not get into that.

(The statement referred to follows:)

STATEMENT ON KENDRICK PROJECT

The Bureau of Reclamation is in the process of negotiating an amendatory repayment contract with the Casper-Alcova Irrigation District the water-users organization covering Kendrick project. In these negotiations we are taking into consideration increased costs, the reduced irrigable area, increased operation and maintenance costs, the advisability of recommending a waiver of the 160-acre limitation and the restricted cropping programs caused by the type of soils and climate in the area. The irrigation district officials have been very cooperative in attempting to work out solutions to the many problems on the project. It is expected that by the next session of Congress we will be able to submit for consideration by Congress an amendatory contract and recommendations for remedial legislation.

RIVERTON PROJECT, WYOMING

PROJECT DATA

AUTHORIZATION

Originally authorized as an irrigation project under the Bureau of Indian Affairs and was placed under the jurisdiction of the Bureau of Reclamation by act of June 5, 1920 (41 Stat. 874, 915).

LOCATION

In Fremont County, Wyo., on the ceded portion of the Wind River Indian Reservation north and northwest of the town of Riverton.

DESCRIPTION

Consists of Bull Lake and Pilot Butte Dams and Reservoirs, Wind River diversion dam, a 1,600-kilowatt powerplant, and a carriage distribution and drainage system to irrigate 79,451 acres of semiarid new lands.

STATUS

The total project construction cost estimate was reduced from the previous $29,897,000 to $24,319,000 (anticipated obligations, $25,343,000). This decrease is the result of revising future construction costs, a decrease in the canal and lateral lining program, deletion of Cottonwood Bench facilities from the estimate until additional studies have been completed, and transfer of transitional development costs from the estimated construction cost.

On June 30, 1954, the project was 79 percent complete. Functionally completed works include all joint facilities, power facilities, and the development and settlement of 59,519 acres in Midvale Irrigation District, North Pavillion area, and North Portal area. During fiscal year 1955 drainage investigations and construction will continue in the North Portal area, administration of Public Law 258 will continue, laterals will be extended, and farm turnouts installed to serve amended units.

REPAYMENT

Status of repayment contract negotiations.—Cost of the first and second divisions is covered in amendatory repayment contract authorized by the act of June 23, 1952 (66 Stat. 151), and executed in 1952 with Midvale Irrigation District. Repayment of third division costs will be covered in a repayment contract to be negotiated with public land settlers following formation of an irrigation district.

Amount to be repaid and repayment period.—An estimated 92-year period will be required under the amendatory repayment contract with Midvale District to return original construction cost of first and second divisions exclusive of rehabilitation and betterment costs. Repayment for third division costs has not been determined, but is expected to exceed water users' ability to pay in 40 years and therefore will be submitted for consideration of the Congress. Return of commercial power allocation ($466,121) is expected by 1959. Return of irrigation costs ($297,047) to be repaid from power revenues is scheduled to be completed by 1988 or an overall period of 49 years.

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Repayment costs allocated to irrigation

Water users	$23,998,798
Nonreimbursable [1]	608,034
Power, direct	297,047
Total	24,903,879

[1] Pursuant to act of June 23, 1952.

Repayment costs per acre

Federal investment per acre	$310.00
Nonreimbursable	8.00
Repaid from power revenues	4.00
Repaid from irrigators	298.00
Annual water users charges:	
Construction	1.40
Operation and maintenance	1.60
Total	[1] 3.00

[1] Annual charge applicable to 1st and 2d divisions only.

Gross crop income per acre resulting from project irrigation (actual for calendar year 1953), $41.

HISTORY OF PROJECT DEVELOPMENT

Initial data: Planning, 1904; advance planning, 1918; construction, 1918.
Date of functional completion of construction: After fiscal year 1961.
Fiscal year and amount of initial allotment of appropriation for construction: Fiscal year 1921, $100,000.

Original estimated cost	$6,777,025
Allocation of cost unallocated	6,777,025
Present estimated cost:	
Total construction cost	24,319,000
Transitional development	1,051,000
Total cost	25,370,000
Tentative allocation of cost:	
Irrigation	24,903,879
Power	466,121
Total cost	25,370,000

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (system) full	59,519	59,519	59,519	79,451
Power (kilowatts)	1,600	1,600	1,600	1,600
Power rates (mills per kilowatt-hour):				
Firm at 50 percent load factor	7.1	7.1	7.1	5.5
Nonfirm (average)	4.3	4.3	4.3	3.3

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$25,343,000
Total obligations to June 30, 1954		19,995,610
Allotment, fiscal year 1955	$298,500	
Prior year balance available	181,000	
Total obligations, fiscal year 1955		479,500
Allotment, fiscal year 1956	$300,000	
Total obligations, fiscal year 1956		300,000
Balance to complete		4,567,890

Work proposed, fiscal year 1956

Joint facilities, completed.—Included are the operating Bull Lake and Pilot Butte Dams and Reservoirs, Wind River diversion dam, Wyoming Canal, first division, station 0 to 487 and general property for operation of these facilities.

Midvale Irrigation District, completed facilities.—Includes the completed and operating second division of the Wyoming Canal, station 487 to 883, the pilot canal and laterals, necessary drainage facilities, the Midvale farm unit development.

Wyoming Canal, third division, station 883 to end ($3,000).—Minor construction work will be completed.

Muddy Ridge Canal, third division, station 16 to 1053.—All activity on this item has been deferred.

Wyoming laterals, third division, station 883 to 3304.—All further activity on this item has been deferred.

Muddy Ridge laterals, third division.—All activity on this item has been deferred.

Wyoming Canal drains, third division ($265,100).—Construction of additional open and closed drains in the North Pavilion and North Portal areas as well as construction by contract of a terminal wasteway structure is tentatively planned subject to reexamination of investigation reports in justification thereof.

Muddy Ridge drains.—All activity on this item has been deferred.

Farm unit development, third division ($42,000).—For administration of Public Law 258.

Channels, levees, and flood works, Muddy Ridge.—All activity on this item has been deferred.

General property, third division.—All further activity on this item has been deferred.

Power facilities, completed.—Includes the operating Pilot Butte powerplant and 89 miles of 34.5 kilovolt transmission line.

Chairman HAYDEN. The next is Riverton project, a very old project, on which you are asking for $300,000.

Do you have a record of how many settlers have left Riverton to go to other projects?

Mr. NIELSEN. I am sure we can develop that for you, sir.

Chairman HAYDEN. I would like to know how many there are and where they went.

Mr. NIELSEN. We will supply that for the record, sir.

(The information referred to follows:)

SELECTION OF LIEU FARM UNITS UNDER THE ACT OF AUGUST 13, 1953 (PUBLIC LAW 258)

Under the provisions of the act of August 13, 1953, a total of 78 settlers on the Riverton project, in Wyoming, have thus far relinquished their base units and selected lieu units on other projects as follows: Columbia Basin project, Washington, 10; Minidoka project, Idaho, 39; Gila project, Arizona, 21; and Coachella division, All-American Canal system, California, 8.

ACREAGE LIMITATION

Chairman HAYDEN. What was the original limitation? Was it 160 acres?

Mr. MITCHELL. The limitation was 160 acres, yes.

Chairman HAYDEN. Are these people who are leaving all people who have 160 acres?

Mr. MITCHELL. Probably not 160 acres, but the problem arises in that the lands they did have, or did originally have, have deteriorated to the extent where they can no longer make a living on their unit. For instance, their farm unit originally contained 140 acres of irrigable land where now, due to deterioration, they may have not over 40 acres.

Chairman HAYDEN. It may be because the land is waterlogged?

Mr. MITCHELL. It is waterlogged, and contains alkali and salts.

Chairman HAYDEN. There is no practical way of draining it?

Mr. MITCHELL. Most of it, no. It is too expensive.

Chairman HAYDEN. Is that due to hardpan or some geological difficulty? What is it?

Mr. MITCHELL. That is correct. The area is entirely underlain by shale, and this shale is a type of shale that contains high quantities of alkali and salts.

Chairman HAYDEN. About how many feet of soil did they have to start with that looked like it was good?

Mr. MITCHELL. It runs about 3 to 5 feet, with some of it more.

Chairman HAYDEN. Three to five feet of good soil would be all right, but 3 to 5 feet of soil that would later become impregnated with alkali is something else.

Mr. MITCHELL. That is right.

Chairman HAYDEN. And there is no cure for it?

Mr. MITCHELL. The only cure for it is drainage, and in this case that is uneconomical. You may have peculiarities in a soil where you have alkali, by having a sealing effect within the soil itself which makes it more or less impermeable to water, and, as a consequence, it is almost impossible to wash the salts out of it once it becomes impregnated.

Chairman HAYDEN. Did we know enough about good soil surveying at the time this land was settled to really have been able to foretell what would happen, or is it just bitter experience that has taught the lesson?

Mr. NIELSEN. I think it is principally experience. We think we know enough now to evaluate land and the possible effects of irrigation. We are satisfied we do. But when that project came into being, we did not, quite apparently, know enough about it.

Chairman HAYDEN. That was, of course, some few years ago.

Mr. NIELSEN. That goes back some 40 years.

Mr. MITCHELL. The project was started about 1920, although construction of the third division was not undertaken until 1946.

Chairman HAYDEN. I believe you did seek to avoid another situation something like it in eastern North Dakota where it was first proposed to irrigate lands that had been covered with glaciers at one time, which had disturbed the soil so that you could not tell definitely about it. I think you abandoned plans to irrigate that area, did you not?

Mr. MITCHELL. Yes, sir.

Senator YOUNG. It was in northwestern North Dakota.

Chairman HAYDEN. Yes.

SHOSHONE PROJECT, WYOMING

PROJECT DATA

AUTHORIZATION

By the act of June 17, 1902 (32 Stat. 388), and the act of 1939 (53 Stat. 1187).

LOCATION

In the valley of the Shoshone River in Park and Bighorn Counties, north-central Wyoming, with a small area extending into Carbon County, Mont. The project area includes the towns of Powell, Ralston, Garland, Deaver, and Frannie, and lies adjacent to the towns of Cody and Cowley.

DESCRIPTION

Consists of Buffalo Bill Dam and Reservoir (439,800 acre-feet), Corbett diversion dam, Willwood diversion dam and appurtenant canal and lateral systems. The power division includes the Shoshone powerplant of 5,600 kilowatts, the Heart Mountain powerplant of 5,000 kilowatts, and 163.4 miles of transmission line facilities connecting the MRBP transmission division system to the south and east. The primary purpose of the project is to provide a full water supply for the irrigation of 100,350 acres made up of 4 divisions, Garland, Frannie, Willwood, and Heart Mountain, of semiarid land in the northwestern section of the State.

STATUS

The total project construction cost estimate was reduced from the previous $24 million to $22,105,000 (anticipated total obligations $22,502,000) due primarily to the transfer of the irrigation facilities for Chapman Bench to Shoshone extensions unit. On June 30, 1954, the project was 96 percent complete with all facilities functionally completed. Work remaining to be completed and which will be underway in fiscal years 1955 and 1956 consists of canal and lateral lining, channel and structure protection, settler assistance and land development, drainage, restoration of lands, extension of laterals to serve the former War Relocation Administration camp area and the amendment of approximately 1,000 acres of irrigable land to present farm units.

REPAYMENT

Construction repayment contracts for the completed Garland, Frannie, and Willwood divisions have been entered into and the operation and maintenance of these divisions was transferred to the irrigation districts during 1927, 1930, and 1949, respectively. Only the Heart Mountain division, Buffalo Bill Dam and Reservoir, Shoshone and Heart Mountain powerplants and their transmission systems are now operated by the Government.

An irrigation district has been formed on the Heart Mountain division preliminary to the negotiation of a repayment contract. It is expected that the estimated $246 per acre Heart Mountain division construction costs will exceed the ability of the water users to pay in 40 years and hence it will be necessary to submit the proposed contract to the Congress for approval. The operation and maintenance of the Heart Mountain division is expected to be turned over to the water users within the next 2 years. Substantial revenues from annual water rental charges are being collected on the Heart Mountain division.

Beginning July 1, 1952, the transmission division of Missouri River Basin project assumed the operation and maintenance of the transmission facilities of the Colorado-Nebraska-Wyoming interconnected system, including those of Shoshone project, and does the marketing of the power, all as the agent of the various projects involved. Shoshone project continues to operate its own powerplants and is credited with revenues annually for its production and transmission systems investments by allocations of power sales revenues from MRBP transmission division.

Repayment costs allocated to irrigation:	
Water users	$15,867,757
Chargeoffs and adjustments	1,811,178
Power	639,000
Total	18,317,935
Repayment costs per acre:	
Federal investment per acre	$182.00
Chargeoffs and adjustments	18.00
Repaid from Shoshone project surplus power revenues	6.00
Repaid from irrigators	158.00
Annual water users charges:	
Construction	2.30
Operation and maintenance	3.00
Total	5.30

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1903; advance planning, 1904; construction, 1904.

Construction costs

Original estimated cost	[1] $2,250,000
Total estimated construction cost	22,105,000
Transitional development	412,471
Present estimated cost	22,517,471
Allocation of cost:	
Irrigation	18,317,935
Power	4,199,536
Total	22,517,471

[1] Reclamation allotment set aside by Secretary of the Interior Apr. 10, 1904.

Schedule of development

	Initial operation		Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
	Date	Number				
Irrigation (acres) full	1908	75,100	99,350	99,350	100,350	100,350
Power (kilowatts)			10,600	10,600	10,600	10,600
Power rates (mills per kilowatt-hour):						
Firm at 50 percent load factor			7.1	7.1	7.1	5.4
Nonfirm			4.3	4.3	4.3	3.3

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$22,502,000
Total obligations to June 30, 1954		21,347,854
Allotment, fiscal year 1955	$470,000	
Total obligations, fiscal year 1955		470,000
Allotment, fiscal year 1956	$300,000	
Total obligations, fiscal year 1956		300,000
Balance to complete		384,146

Work proposed, fiscal year 1956

Buffalo Bill Dam and Reservoir.—This facility is completed and is now in operation.

Buffalo Bill Dam and Reservoir—Rehabilitation.—Studies on alternate schemes for rehabilitation of the outlet works will be deferred after fiscal year 1955.

Completed divisions (Garland, Frannie, and Willwood).—These divisions completed in prior years and now in operation.

Canals and conduits ($7,916).—The canal lining program will be continued by contract.

Laterals ($19,415).—Work will consist of continuation of the lateral lining program and minor force account activities on channel protection below structures and at critical points along the lateral system.

Drains ($220,456).—Drainage investigations and extension of the drainage system by contract, as the need becomes apparent, will be continued. Construction of drains by minor force account will also be continued to relieve emergency situations.

General property.—By the end of fiscal year 1955, ditchrider's residences will have been completed.

Farm unit development ($55,859).—These funds will be used for processing of amendments to present farm units and the processing of exchange units in accordance with Public Law 258. These funds will also provide for continuation of surveys in reestablishment of farm unit boundaries, preparation of farm unit plats to be submitted to the Bureau of Land Management, extension of the

lateral system to serve the amended units and a minor amount of rough leveling of amended farm units.

Power facilities.—Work completed. This heading includes the Shoshone and Heart Mountain powerplants and 163.4 miles of transmission lines.

Chairman HAYDEN. On Shoshone, there is another $300,000 on an old project. What is that for?

Mr. NIELSEN. That is principally for drainage and some amount of farm unit development, and processing present farm units, processing exchange units, in accordance with Public Law 258.

Chairman HAYDEN. Have as many settlers talked about leaving there as the Riverton project?

Mr. NIELSEN. No, sir.

Chairman HAYDEN. They are pretty well satisfied?

Mr. NIELSEN. Generally, but we do have some headaches.

DRAINAGE AND MINOR CONSTRUCTION

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Allotment, fiscal year 1955	$799,052
Contributions	1,181
Prior year balance available	1,341,125
Balance available in subsequent years	−557,130
Total obligations, fiscal year 1955	1,584,228
Allotment, fiscal year 1956	348,000
Prior year balance available	557,130
Balance available in subsequent years	−216,781
Total obligations, fiscal year 1956	688,349

DESCRIPTION

The drainage and minor construction program consists of projects on which all major construction has been completed, except facilities which are temporarily deferred, or on which small amounts of funds are programed in the budget year. The programed amounts provide for drainage work, minor repair or replacement work, miscellaneous finishing activities, or preconstruction work on the temporarily deferred facilities.

REPAYMENT

The reimbursable portion of the costs to be incurred by the work on these projects will be repaid by contracts in force or currently under negotiation.

WORK PROPOSED, FISCAL YEAR 1956

The fiscal year 1956 program involves work on seven projects and the preparation of completion reports and as-built drawings. Two of these projects are scheduled to complete their drainage and minor construction activities during the fiscal year.

DETAIL OF WORK PROPOSED, FISCAL YEAR 1956

Projects with fiscal year 1956 program

All-American Canal, Arizona-California ($230,349)

Description.—The primary purpose of the system is to provide a water supply to 530,000 acres in the Imperial Valley and 74,800 acres in the Coachella Valley, through works constructed entirely within the United States. Capacity is constructed in the project works to serve additional areas on the Pilot Knob Mesa comprising 11,300 acres. Principal facilities of the system include Imperial Dam and desilting works and Laguna Dam constructed as part of the Yuma project, the 80-mile All-American Canal, the 124-mile Coachella Canal, the Coachella

Valley flood protective works, and the 450-mile concrete pipe distribution system serving the Coachella Valley.

Work proposed, fiscal year 1956.—Drainage investigations will continue and construction will be initiated on a canal crossing for the Mecca-Blythe Highway if a satisfactory agreement is reached with the State of California. Approval of drainage plans prepared by the Coachella Valley County Water District is in accordance with contractual arrangement. Construction of the highway crossing is required by an agreement made with the State of California.

Buffalo Rapids project, first division, Montana ($120,000)

Description.—The first division of the Buffalo Rapids project is located along the north bank of the Yellowstone River in Prairie and Dawson Counties in eastern Montana near Glendive. The primary purpose of the project is to provide irrigation water, which is pumped from the Yellowstone River, to 13,903 acres of semiarid land.

Work proposed, fiscal year 1956.—Contract for construction of drainage ditches and related structures will be awarded and construction started. Drainage observation wells will be read at regular intervals. Funds are required because farm units are being withheld from sale as the result of serious seepage conditions. Proposed construction of the drainage system will alleviate this condition, permit the sale of the lands, and reclaim croplands.

Buffalo Rapids project, second division, Montana ($80,000)

Description.—The second division of the Buffalo Rapids project is located along the south bank of the Yellowstone River in Prairie and Custer Counties in eastern Montana between Miles City and Fallon. Water from the Yellowstone River is pumped to the project which consists of three units with a total of 9,519 irrigable acres.

Work proposed, fiscal year 1956.—Contract for construction of drainage ditches and related structures will be awarded and construction started. Seepage and water level conditions will be studied and detailed investigations made to determine other contracts to be awarded. This is necessary in order that corrective measures can be instituted and prevent water logging of irrigated lands, reduction of crop returns and eventual removal of affected areas from cultivation.

Crescent Lake Dam project, Oregon ($61,000)

Description.—Crescent Lake Dam is a timber and rock-filled structure and has been in operation since 1922. The reservoir is situated on Crescent Creek, a subtributary of the Deschutes River, approximately 50 miles southwest of Bend, Oreg. Storage releases from this reservoir serve 6,650 irrigable acres of the Deschutes County Municipal Improvement District.

Work proposed, fiscal year 1956.—Work on the rehabilitation of Crescent Lake Dam is scheduled for completion in fiscal year 1956. Funds available will be used for progress payments on the contract awarded in fiscal year 1955 for this emergency work.

Paonia project, Colorado ($3,000)

Description.—The project is located in Delta and Gunnison Counties in west central Colorado near Paonia. The purpose of the project is to provide irrigation water to 2,210 acres of new land and 14,830 acres of land now inadequately supplied. However, a full season water supply cannot be delivered until the completion of Spring Creek Dam which requires reauthorization for construction.

Work proposed, fiscal year 1956.—Program for fiscal year 1956 includes technical assistance and guidance in water exchange problems and maintenance of the project service facilities pending reauthorization of Spring Creek Dam for construction.

Pine River project, Colorado ($25,000)

Description.—The project is located in southwestern Colorado near Bayfield. The Bureau of Reclamation is concerned only with Vallecito Dam and Reservoir with available storage capacity to supply water to 69,000 acres of land.

Work proposed, fiscal year 1956.—Clearing of the reservoir area of brush and timber will be completed. This will terminate all construction activity on this project. The floating debris is a menace to boating, detracts from the appearance of the reservoir, and collects at the spillway gates.

Sun River project, Greenfield division, Montana ($110,000)

Description.—This project is located in north central Montana in Teton and Cascade Counties, near Fairfield. Project works extend along the north side of

the Sun River and are capable of furnishing a full supply of water to 84,736 acres. Remaining construction includes completion of work on the canal system and completion of a long-range program of drainage construction.

Work proposed, fiscal year 1956.—Construction will be initiated on an inlet transition to a drop on the Pishkun Canal. Construction will be started on other structures and waterways as studies underway point out the need for additional construction to remove restrictions in the supply canals. The divisionwide drainage program will be continued as studies point out the need for drainage of seeped areas.

Completion reports and as-built drawings ($59,000)

Description.—Subsequent to completion of a project or a major segment thereof, it is necessary to prepare completion reports and as-built drawings for purposes of permanent records. To avoid submitting individual requests for small amounts of funds for this purpose on completed projects, the fund requirements have been consolidated and included as an item of the drainage and minor construction program.

Work proposed, fiscal year 1956.—During fiscal year 1956 technical records of design and construction and as-built drawings will be prepared for five projects on completed separable features which have passed from the construction status to operation and maintenance status before the necessary work of preparing these records could be completed. These records are of vital importance in cases of future alterations, rearrangements of machinery, emergency repairs, or replacements.

Projects completing in fiscal year 1955

Avondale irrigation project, Idaho

Description.—The existing works of the Avondale Irrigation District consist primarily of a privately constructed irrigation pump plant and distribution system serving 922 acres. The irrigation land involved is made up of tracts ranging from less than 1 acre in size to a tract of 75 acres. Although the irrigation pump plant and pipeline system were designed primarily for irrigation service, they are also used jointly to provide the district with its domestic water needs.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

Boise project, Anderson Ranch Dam, Idaho

Description.—Anderson Ranch Dam is a multiple-purpose development embodying storage for irrigation, flood control, silt retention, and a power installation of 27,000-kilowatt capacity, consisting of two 15,000 kilovolt-ampere units rated at 90 percent power factor. Provision is made for the addition of a third 15,000 kilovolt-ampere unit at some future date.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

Boise project, Payette division, Idaho

Description.—The Payette Division consists of the 700,000 acre-feet capacity multiple-purpose Cascade Reservoir, and single-purpose irrigation facilities for serving 51,702 acres of land in southwestern Idaho. Some 26,800 acres located below the Black Canyon Main Canal are irrigated by gravity flow, while the remaining acres of higher land are watered by pumping from the canal.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

Dalton Gardens irrigation project, Idaho

Description.—The existing works of the Dalton Gardens Irrigation District consisted of a privately developed but deteriorated irrigation pumping plant and pipeline distribution system, serving 944 acres, in tracts of from 1 to 5 acres. The presently authorized rehabilitation program is to reconstruct the irrigation pumping plant on Hayden Lake with an enlarged capacity of 5,500 gallons per minute and to rebuild the irrigation pipe distribution system serving the 944 acres.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

Grants Pass project, Savage Rapids Dam, Oreg.

Description.—Savage Rapids Dam is a combination multiple-arch and gravity concrete diversion dam, 456 feet long with a maximum spillway height of 38 feet. Water is diverted from the Rogue River by means of a gravity canal at the left

abutment and 2 high-line canals 1 on each side of the river supplied by turbine-driven pumps to irrigate 10,124 acres in the vicinity of Grants Pass, Oreg.

Work proposed, fiscal year 1956.—All work presently authorized and financed is scheduled for completion in fiscal year 1955.

Hungry Horse, project, Montana

Description.—This multipurpose project provides for electric generation, flood control and regulation of river flow. Major project features include a 564-foot high concrete arch gravity-type dam and a power plant housing 4 generating units of 71,250 kilowatts each.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

Mancos project, Colorado

Description.—Project works comprise Jackson Gulch Reservoir, with an active capacity of approximately 10,000 acre-feet, an inlet canal of 250 second-feet, and an outlet canal of 200 second-feet capacity. Surplus water from the West Mancos River is stored in Jackson Gulch Reservoir and released to the river during the irrigation season. Water provided by the project works will ultimately furnish a supplemental supply for 7,872 acres now inadequately irrigated, and full supply for 726 acres of irrigable land not now irrigated near the town of Mancos, Colo.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

Milk River project, Fresno Dam, Montana

Description.—The Milk River project supplies water for about 124,000 acres of land in Blaine, Glacier, Phillips, and Valley Counties in north central Montana. Storage is provided in Sherburne Lakes, Fresno, and Nelson Reservoirs. The work proposed for this project includes principally the completion of Fresno Dam which had not been accomplished because of the settlement of the main embankment since construction.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

Provo River project, Utah

Description.—The project conserves water resources of Weber, Provo, and Duchesne Rivers and utilizes the water for supplemental irrigation of 46,609 acres of lands heretofore inadequately served from existing sources, and 10,000 acres of new land, and in addition provides badly needed domestic and industrial water supplies for the metropolitan districts of Salt Lake City, Provo, Orem, Lindon, Pleasant Grove, American Fork, and Lehi, Utah.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

San Luis Valley project, Platoro unit, Colorado

Description.—Platoro Dam and Reservoir are located on the upper Conejos River in the south central part of Colorado. The primary purpose of the project is to provide a regulated water supply for supplemental irrigation of approximately 81,000 acres of land now receiving a partial supply of water and control floods on the Conejos River.

Work proposed, fiscal year 1956.—All work is scheduled for completion in fiscal year 1955.

Chairman HAYDEN. Next you have drainage and minor construction.

Mr. NIELSEN. I think I should make one point in connection with that. Last year, the committee told us to come back and report this year on a bridge at Coachella. Over the past year we have done our best job of negotiating with the State of California that we know how to do. We are back in here to report that we have negotiated all we can, and we still have a bridge that is going to cost more than $200,000 to build, sir.

Chairman HAYDEN. What are you going to do about it?

Mr. NIELSEN. We have carryover money. But we were prohibited from spending it until we came back and satisfied you as to the best job of negotiating we could do.

Chairman HAYDEN. How far were you apart when you finished negotiating?

Mr. NIELSEN. We did not gain very much ground, Senator.

REHABILITATION AND BETTERMENT

PROJECT DATA

AUTHORIZATION

Rehabilitation and betterment work on existing projects was authorized by the act of October 7, 1949 (63 Stat. 724), amended by the act of March 3, 1950 (64 Stat. 11).

LOCATION

The program for fiscal year 1956 embraces rehabilitation and betterment work on 9 reclamation projects located in 7 of the 17 Western States. The States in which work is proposed are: Arizona, Colorado, Idaho, Montana, Nebraska, Oregon, and Wyoming.

DESCRIPTION

On a number of the older projects which have been in operation for many years many of the structures in the canal and lateral systems and at the dams have far exceeded their useful life, requiring an excessive maintenance program to continue operations. The deteriorated facilities also often result in inefficient use or loss of irrigation water. This deferred maintenance began in the depression years of the 1930's and was accentuated by World War II scarcity of labor and materials. Since World War II the great increase in costs has added to the projects' burden of attempting to finance improvements and maintain operations out of current revenues. In addition, there have been many changes in land use, methods of irrigation and types of crops raised and, to place these older projects on a basis comparable to those now being constructed, the facilities must not only be rehabilitated but also improved.

STATUS

As a result of project surveys made in 1947–48, Congress in 1949 authorized the Bureau to undertake a necessary program of project rehabilitation. Those projects most urgently needing rehabilitation and betterment assistance were selected for initial participation in the program. Nine projects received allotments from the first year's appropriation for this work in fiscal year 1949. Additional projects have been added from year to year as repayment arrangements have been completed and funds made available. As of June 30, 1954, work was underway on 8 projects of which 3 will be completed by the end of the current fiscal year. In addition, work will be initiated and completed on the rehabilitation and betterment of the Humboldt, Nevada, and Umatilla, Oregon, projects.

REPAYMENT

In accordance with the authorizing act, provision for full reimbursement must be completed and approved by the Congress before rehabilitation and betterment activities are initiated.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$27,622,566
Total obligations to June 30, 1954		11,090,576
Allotment, fiscal year 1955	$1,583,799	
Prior year balance available	90,940	
Total obligations, fiscal year 1955		1,674,739
Allotment, fiscal year 1956	$2,125,000	
Total obligations, fiscal year 1956		2,125,000
Balance to complete		12,732,251

Work proposed, fiscal year 1956

Rehabilitation and betterment work will be continued on six projects during the year. Rehabilitation of two of these projects, the Shoshone project in Wyoming, and the Milk River project in Montana, are scheduled for completion by the end of fiscal year 1956. In addition, work will be initiated on the Arnold project, the Medford and Rogue River Valley Irrigation Districts of the Rogue River Basin project, and the Orchard Mesa division of the Grand Valley project. The Arnold, and Grand Valley projects will also be completed by the end of the fiscal year.

Detail of work proposed, fiscal year 1956

Arnold project, Oregon ($90,000).—The program for fiscal year 1956 provides for the replacing of six deteriorated wood flumes, totaling 2,848 lineal feet in length, with semicircular metal flume supported by concrete footings and creosoted fir framing. Continued maintenance of its large failing flumes appears to be beyond the ability of the district. Economy of the community would be seriously affected if irrigation were discontinued. The district desires to replace all flumes which are now seriously deteriorated and also those flumes which have a remaining life expectancy of less than 5 years. When a flume reaches the age and condition where replacement will be needed in a period of 5 years or less, maintenance costs usually become heavy. Every year, more of the planks and timbers need replacing, requiring increasing expenditures to keep the flumes in operating condition. The old flumes also waste considerable water through excessive leakage.

Belle Fourche project, South Dakota.—Balance of work scheduled after fiscal year 1961.

Bitter Root project, Montana.—Scheduled for completion in fiscal year 1955.

Boise-Black Canyon Dam, Idaho ($260,000).—This amount will be used to initiate completion work on the downstream face of the spillway section and the placing of stabilization concrete on the abutment sections of the dam. The Black Canyon Dam is the key structure of the Boise project irrigation and power systems. Emergency measures to protect the stability of the structure have been taken. The fiscal year 1956 program provides for the initiation of the actions necessary to complete the rehabilitation of the dam.

Grand Valley project, Colorado ($150,000).—Program for fiscal year 1956 includes the replacement of flumes Nos. 1, at station 84+99; 2, at station 136+99; 3, at station 333+17; 4, at station 433+64; and Mutual Mesa flume; all of these structures are on the lower lift canal. On the upper lift canal, flumes Nos. 1, at station 93+80; 2, at station 155+51; 3, at station 393+85; 4, at station 562+59 will be replaced as well as 450 feet of bench flume between flume No. 1 and flume No. 2. The tailrace structure on the pumping plant would be modified to include new power-operated gates, an activating motor, and necessary foundation and protective work.

Many structures on the Orchard Mesa division have been used beyond their economic lives and are in very poor condition. Material and manpower shortages existing during the past war years prevented the water users from accomplishing badly needed repair work. The present rehabilitation and betterment requirements are beyond the water users' financial ability to handle concurrently with the expenditures.

Humboldt project, Nevada.—Scheduled for initiation and completion in fiscal year 1955.

Klamath project, Oregon.—Scheduled for completion in fiscal year 1955.

Milk River, Mont., ($45,000).—Work will be continued to completion on the St. Mary Canal. This work involves removing slides from the main canal, installing drains, scaling, painting, and covering the lower St. Mary pipe. Other structures will be investigated and repairs, where needed, will be completed to the extent of available funds. This work will put the facilities involved in a safe operating condition and make it possible for the districts to maintain them with their regular annual collections.

North Platte project, Nebraska-Wyoming ($370,000).—This amount will provide for installation of 37,257 lineal feet of concrete pipe and 2 miles of asphalt membrane lining on 5 individual laterals. This work is necessary to prevent loss of water and damage of lands by seepage.

Owyhee project, Oregon-Idaho (*$202,000*).—The program for fiscal year 1956 includes installation of four new pumps for the Gem Irrigation District pumping plant and purchase of new pumps and start of rehabilitation of the Ontario-Nyssa pump plant. Construction and rehabilitation will be initiated on completion of a wasteway at tunnel No. 5 outlet on the south main canal, partially built during the construction stage of the project. Also a wasteway outlet is to be provided at the Owyhee River siphon on the north main canal. This outlet will utilize the Owyhee River channel for emergency waste flows.

The Gem and Ontario-Nyssa Irrigation District pump plants serving approximately 26,000 acres of land have been in service over 40 years. Their present condition is such that replacement of the pumps and rehabilitation of the plants in general must be accomplished as soon as possible to insure uninterrupted water deliveries.

It is necessary to provide two additional wasteways for protection of the main canals. One wasteway serving the main south canal was partially constructed some years ago. The wasteway structure from the canal is installed. Also, a concrete chute section at the lower end, under the highway and railroad, is complete. To utilize the constructed work, it is necessary to perform some channel excavation above the irrigable land and construct a concrete chute through the irrigable land to connect up with the existing crossings leading to the Snake River. The wasteway to be constructed to serve the main north canal will replace one constructed several years ago immediately above the Owyhee River siphon, but which was destroyed by a slide.

Riverton project, Wyoming.—Scheduled for completion in fiscal year 1955.

Rogue River Basin project, Oregon (*$350,000*).—Program for fiscal year 1956 will initiate the work necessary to rehabilitate the joint-and-single-purpose facilities of the Medford and Rogue River Valley Irrigation Districts. Work on the joint-use facilities consisting of the Four Mile Dam, Fish Lake Dam, and the main canal will be started and completed during the year, with the exception of the main canal which will not be completed until the spring of 1957. Work on the single-purpose facilities which are the Medford and Hopkins Canals will be started. The Hopkins Canal work will be completed within the year. The Medford Canal work will not be completed until the spring of 1957. Work on the distribution systems of the Medford and Rogue River Valley Irrigation Districts will also be started.

Salt River project, Arizona (*$635,000*).—Stewart Mountain Dam: Grouting of horizontal construction joints will be continued. It is anticipated that observations during the forthcoming year will reveal locations where such grouting will be required to adequately complete the grouting program started in fiscal year 1953.

Canals and conduits: Work includes lining one or both banks of main canals at critical locations totaling approximately 60,000 square feet and for constructing four additional canal structures.

Laterals: Work will continue under this item through the year. The scheduled funds for this fiscal year will be used to construct approximately 15 miles of additional lining, approximately 3 miles of pipelines for replacement of open laterals, and for continuing the rehabilitation of lateral structures.

Shoshone project, Wyoming (*$23,000*).—Supplements to contract I79r–1586 with Willwood Irrigation District will be signed during fiscal year 1955 for construction of drains. These funds will be required for progress payments on this work. Drainage facilities must be provided to prevent loss of productive lands through seepage. The 1956 program completes the current program of drain construction.

Umatilla project, Oregon.—Scheduled for initiation and completion in fiscal year 1955.

Additional projects.—Scheduled to start in fiscal year 1957.

SCHEDULE OF CONSTRUCTION PROGRAM, FISCAL YEARS 1955 AND 1956

Rehabilitation and betterment of existing projects

Program item	Estimated total	Total to June 30, 1954	Program current year 1955	Program budget year 1956	Balance to complete
(1)	(2)	(3)	(4)	(5)	(6)
Arnold, Oreg	$90,000			$90,000	
Belle Fourche, S. Dak	688,195	$373,671	$616		$313,908
Bitter Root, Mont	89,290	45,290	44,000		
Boise-Black Canyon Dam, Idaho	989,301	514,336	2,185	260,000	212,780
Grand Valley, Colo	150,000			150,000	
Humboldt, Nev	118,000		118,000		
Klamath, Oreg	52,000	45,175	6,825		
Milk River, Mont	863,176	717,535	100,641	45,000	
North Platte, Nebr.-Wyo	3,660,000	2,502,526	476,127	370,000	311,347
Owyhee, Oreg.-Idaho	571,000		45,000	202,000	324,000
Riverton, Wyo	1,947,970	1,786,282	161,688		
Rogue River Basin, Oreg	1,673,065			350,000	1,323,065
Salt River, Ariz	6,000,000	4,477,785	640,064	635,000	247,151
Shoshone, Wyo	705,569	627,976	54,593	23,000	
Umatilla, Oreg	25,000		25,000		
Additional projects	10,000,000				10,000,000
Total obligations	27,622,566	11,090,576	1,674,739	2,125,000	12,732,251
Method of financing:					
Allotment, fiscal year 1955			1,583,799		
Prior year balance available			90,940		
Allotments required				2,125,000	12,732,300

Chairman HAYDEN. How about rehabilitation and betterment?

The justifications will be made a part of the record.

Mr. NIELSEN. We think it has been a very successful program and particularly in the Salt River area. I think they are well satisfied with it.

Chairman HAYDEN. They are indeed.

Mr. NIELSEN. Beside Salt River, we are going into the Arnold project, in Oregon, the Boise-Black Canyon Dam on the Boise project, the Grand Valley project in the Orchard Mesa area, the Humboldt project in Nevada, the Milk River in Montana, the North Platte project in Nebraska, the Owyhee project, and a good many more. It is catching up on deferred maintenance, possibly maintenance which should not have been deferred but in any event we have it on our hands now. It is fully covered by repayment contracts, of course.

YUMA AUXILIARY PROJECT, ARIZ.

Chairman HAYDEN. There are two projects that we skipped—the Yuma auxillary and the Davis Dam projects. Do you have any problems on these projects?

Mr. NEILSEN. No, sir, Mr. Chairman. These projects are proceeding on schedule.

Chairman HAYDEN. The justifications on these two projects will be included in the record.

(The justifications referred to follow:)

PROJECT DATA FOR CONSTRUCTION

AUTHORIZATION

Originally authorized by the act of January 25, 1917 (39 Stat. 868). By the act of June 13, 1949 (63 Stat. 172), the area of the division was limited to that included in the first Mesa unit and the Secretary of Interior was authorized to

contract with a competent water users' organization for the construction of works to enable the project to obtain delivery of water through the works of the Gila project instad of the Yuma project and to extend and improve the distribution system to more adequately supply the needs of the water users.

LOCATION

Southwestern part of Yuma County, in southwestern Arizona.

DESCRIPTION

Water for irrigation of the auxiliary project is furnished from the works of the Gila project, which divert Colorado River water at Imperial Dam. The auxiliary project is operated by the Bureau, and under contract dated, December 22, 1952, the irrigation district will advance to the United States its share of the Gila project carriage cost of the common facilities utilized by them in the delivery of water through the Gila project works, and the total cost of the Bureau operation and maintenance.

STATUS

Work necessary to supply water to the auxiliary project through the works of the Gila project have been constructed under the latter project and delivery of water through the new connection began on July 7, 1953, to serve 2,478 acres presently under water-right application. This district formerly was delivered water through the Yuma project carriage system.

The total estimated construction cost has been reduced from $2,776,487 to $1,160,061 (estimated total obligations $1,160,339). This change is primarily the result of transferring from the construction estimate the previously included investment in facilities of other projects as this is not considered a project construction cost and is only considered in the repayment calculations.

REPAYMENT

The entire cost of the Yuma auxiliary project is allocated to irrigation and the pertinent repayment data is as follows:

Status of repayment contract

The contract, dated December 22, 1952, with the Unit B irrigation and drainage district, representing the water users on the Yuma auxiliary project, provides for repayment of $456,090 for its share in the works common to the Yuma auxiliary project and the Gila project and $510,000 for works necessary to supply water through the works of the Gila project and for extension and improvement of the project distribution system. This obligation, totaling $966,090 is payable over a 60-year period. The cost of works, previously constructed, allocable to lands in the project as limited by the act of June 13, 1949, are being repaid by sale of water rights.

Irrigation repayment:	
Construction cost	$1,160,061
Investment in facilities of other projects	2,072,516
Total project cost	3,232,577
Removed from reimbursability by act of June 13, 1949 [1]	−1,022,382
	2,210,195
Amount to be repaid by:	
Unit B irrigation and drainage district	966,090
Industrial water-rights contracts [2]	625,435
Applied Imperial irrigation district credits	618,670
Total	**2,210,195**

[1] Cost associated with lands removed from project.
[2] Existing and future contracts.

Repayment costs per acre

Federal investment per acre	[1] $482.00
To be repaid—	
From land owners	[2] 190.00
From water users	292.00
Annual water user charges:	
Construction	[3] 4.86
Operation and maintenance	[4] 13.50
Total	18.36

[1] Applicable to reduced area.
[2] Sale of water rights.
[3] Per acre cost for 3,305 acres.
[4] Minimum charge per acre for calendar year 1954 by unit B irrigation and drainage district.

Gross crop income per acre resulting from irrigation (actual for calendar year 1953): $266.

HISTORY OF PROJECT DEVELOPMENT

Initial data: Planning, 1916; advanced planning, 1955; construction, 1955.
Date of functional completion of construction: Fiscal year 1956.
Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1926, $200,000.
(Prior funds included in Yuma project appropriations.)

Schedule of development

Irrigation (acres), full:	
Through fiscal year 1954	2,478
Fiscal year 1955	2,478
Fiscal year 1956	3,305
Ultimate	[1] 3,305

[1] Does not include 79 acres outside project boundaries presently served by project works.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$1,160,339
Total obligations to June 30, 1954		652,339
Allotment, fiscal year 1955	$100,000	
Total obligations, fiscal year 1955		100,000
Allotment, fiscal year 1956	$408,000	
Total obligations, fiscal year 1956		408,000
Balance to complete		

Work proposed, fiscal year 1956

Completed facilities.—Work completed in prior years.

Connection to Gila project.—Work performed by Gila project in fiscal year 1953, to be refunded to Gila in fiscal year 1955.

B-Main canal ($238,164).—Installation of concrete check and lateral turnout structures with screw-lift gates and concrete lining of the existing canal from the previously constructed connection to the Gila project will be accomplished by contract work performed under specifications prepared during the previous year.

Unit-B laterals ($169,558).—Existing laterals will be modified where necessary to permit adequate irrigation service to presently developed land and new concrete pipe laterals will be constructed to serve lands, the development of which has not been possible due to inadequacies of the original distribution system. The work will be accomplished by contract under the same specifications as the canal work.

PARKER-DAVIS PROJECT, ARIZONA-CALIFORNIA-NEVADA, PROJECT DATA

AUTHORIZATION

The Parker Dam power project was authorized by the River and Harbor Act of August 30, 1935 (49 Stat. 1028). The Davis Dam project was authorized on April 26, 1941, by the Secretary of the Interior, under provisions of the Reclamation Project Act of 1939 (53 Stat. 1187). Consolidation of the two projects and

the establishment of the Parker-Davis project was authorized on May 28, 1954, by Public Law 373, 83d Congress.

LOCATION

Parker Dam and Davis Dam are located on the Colorado River, below Hoover Dam. The transmission system is located in south and northwestern Arizona, southeastern California, and Nevada.

DESCRIPTION

The principal features of the Parker-Davis project include Parker Dam and powerplant and Davis Dam and powerplant on the Colorado River, and an extensive transmission system located in Arizona, California, and Nevada. Parker Dam and powerplant, located 155 miles below Hoover Dam, has an installed capacity of 120,000 kilowatts. The Government headquarters area is on the California side of the river. Davis Dam and powerplant, located 67 miles below Hoover Dam, has an installed capacity of 225,000 kilowatts. The Government headquarters area is on the Arizona side of the river. The transmission system comprises 1,625.1 miles of lines which traverse Mohave, Yuma, Maricopa, Pinal, Yavapai, and Cochise Counties in Arizona; San Bernardino, Riverside, and Imperial Counties in California; and Clark County in Nevada. The system includes 34 substations with 1,821,617 kilovolt-amperes installed transformer capacity. The total combined generating capacity of the Parker and Davis powerplants is 345,000 kilowatts. One-half of the installed capacity is reserved for the Metropolitan Water District and it receives approximately one-half of the actual output of the Parker Dam powerplant. The system handles 225,000 kilowatts capacity of the Davis powerplant; 297,500 kilowatts of the Hoover powerplant capacity for the States of Arizona (165,000 kilowatts) and Nevada (132,500 kilowatts); 180,000 kilowatts of steam power for the Arizona Power Authority (source Arizona Public Service Co.); and 1,600 kilowatts from the Siphon Drop powerplant on the Yuma project; which makes a total combined capacity handled of 704,100 kilowatts. The transmission system connects all Bureau powerplants below Hoover, and is interconnected at 19 points with other utility systems. Transmission of power is made at voltages of 230, 161, 115, 69, and 34.5 kilovolts. The general offices and headquarters of the project are located at Phoenix, Ariz.

STATUS

The construction of the dams, powerplants, transmission lines, and substations is substantially complete, and the facilities are all in full operation. The remaining construction work consists of conversion of certain facilities to higher voltages, a communication system, and minor adjusting items.

Funds for the United States share of the operation and maintenance expenses of the project are requested under the appropriation heading "Operation and maintenance." Funds are advanced by the Metropolitan Water District for their share of the operation and maintenance expense. Funds for construction are requested under the appropriation heading "Construction and rehabilitation."

CONSTRUCTION COSTS

The present estimated cost of the Parker-Davis project is $143,839,988. This includes $117,754,351 for the Davis Dam project and $26,085,637 for the Parker Dam power project. The original estimated cost of the Davis Dam project was $41,200,000. The original estimated cost of the Parker Dam power project was $19,469,500.

The estimated cost of Davis Dam project has decreased from $120,077,553 to $117,754,351 (anticipated total obligations $116,042,137). This reduction is primarily the result of deleting Henderson substation additions in Nevada from the Parker-Davis project plans. The total estimated cost of Parker Dam power division of the project has increased from $24,696,120 to $26,085,637, a net increase of $1,389,517 resulting from costs incurred for rights-of-way acquired by the Metropolitan Water District, transfer of plant facilities from Davis Dam project and capitalization of operation and maintenance residences and garages.

Construction of the project was financed with $129,962,857 of Federal appropriation and $13,877,131 contributed from other sources. The major contribution was $12,072,310 advanced by the Metropolitan Water District of Southern California for the construction of Parker Dam power project.

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REPAYMENT

For repayment purposes the costs of the Parker-Davis project are allocated as follows:

Irrigation	$11, 416, 947	Contributions	$13, 877, 131
Mexican treaty	10, 720, 000		
Power	107, 825, 910	Total	143, 839, 988

Repayment of the costs allocated to irrigation and the Mexican treaty are to be made from power revenues with no interest. Repayment of the costs allocated to power are to be made from power revenues with 3-percent interest. The costs represented by the item for contributions are nonreimbursable because they represent items paid for in advance of construction.

All repayments from power revenues will be repaid within 50 years from the date individual facilities become revenue-producing. The repayment period for the Parker-Davis project is from 1943 to 2007.

Schedule of development

	Through fiscal year 1953	Fiscal year 1954	Fiscal year 1955	Ultimate
Parker-Davis (combined):				
Power (kilowatts)	345,000	345,000	345,000	345,000
Average power rated (mills per kilowatt-hour):				
Firm—Davis contracts, at 50 percent load factor	5.4	5.4	5.4	5.4
Nonfirm (average)	3.0	3.0	3.0	3.0

DAVIS DAM ONLY

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$116, 042, 137
Total obligations to June 30, 1954		112, 288, 171
Allotment available, fiscal year 1955	$1, 453, 580	
Prior-year balance available	118, 558	
Total obligations, fiscal year 1955		1, 572, 138
Allotment, fiscal year 1956	$1, 390, 000	
Total obligation, fiscal year 1956		1, 390, 000
Balance to complete		791, 828

Work proposed for fiscal year 1956

Davis Dam, powerplant, terminal facilities, and Davis-Kingman and Needles tap 69-kilovolt lines.—These features completed in fiscal year 1955 or prior years.

Davis-Mesa-Coolidge 230-kilovolt lines ($41,550).—These funds are needed to complete the procurement and the installation of 12.5-kilovolt equipment, supervisory control, and telemetering equipment, and for payment of right-of-way claims and preparation of records, reports, and as-built drawings.

Davis-Hoover interconnection ($1,500).—These funds are needed for payment of right-of-way claims and preparation of records, reports, and as-built drawings.

Davis-Parker 230-kilovolt line.—Feature completed and in service.

Parker 230-kilovolt switchyard ($5,000).—These funds are needed for preparation of records, reports, and "as-built" drawings.

Second Parker-Gila 161-kilovolt line ($8,500).—These funds are needed for payment of right-of-way claims and preparation of records, reports, and "as-built" drawings.

Second Parker-Phoenix 161-kilovolt line ($3,000).—These funds are needed for preparation of records, reports, and "as-built" drawings.

Phoenix substation additions ($18,000).—These funds are needed to complete the installation of supervisory-control equipment and for preparation of records, reports, and "as-built" drawings.

Second Phoenix-Tucson and Coolidge-ED5 crosstie 115-kilovolt line ($18,000).—These funds are needed to complete the installation of telemetering and super-

visory-control equipment, for payment of right-of-way claims, and for preparation of records, reports, and "as-built" drawings.

Tucson-Cochise 115-kilovolt line (*$6,000*).—These funds are needed for payment of right-of-way claims and for preparation of records, reports, and "as-built" drawings.

Yuma 34.5-kilovolt improvements and extensions (*$211,000*).—These funds are needed to complete installation of the first transformer bank and associated equipment to convert the Gila substation for 69-kilovolt service, and for preparation of records, reports, and "as-built" drawings. The second transformer bank at Gila substation is programed under "Substation additions (APA Wheeling contract)."

Power supply to Wellton-Mohawk division—Gila project (*$378,000*).—These funds are needed to convert the Gila-Wellton-Mohawk line and the Wellton-Mohawk No. 2 pumping plant substation to 161-kilovolts, and to prepare records, reports, and "as-built" drawings. This amount includes $220,000 representing the nonappropriation transfer of equipment now at Gila substation (purchased by the Parker Dam power project) to the Wellton-Mohawk substation, and so does not require financing.

Project carrier-current system (*$2,000*).—These funds are needed to complete the installation of supervisory-control and telemetering equipment, and to prepare records, reports, and "as-built" drawings.

Substation additions (*APA wheeling contract*) (*$756,600*).—Includes:

Facilities to be constructed for Wheeling APA power-original contract ($318,600): These funds are needed to complete designs, procure equipment, and initiate installation of equipment for the Cochise substation additions; begin design work for the Prescott substation additions; complete payment on, and installation of, supervisory-control and telemetering equipment; and prepare records, reports, and "as-built" drawings.

Facilities to be constructed for Wheeling APA power-supplemental contract ($438,000): These funds are needed to design and construct the Marana tap; complete the Nogales tap; complete installation of the second transformer bank and associated equipment at Gila substation; complete installation of supervisory-control, telemetering, and minor equipment; and prepare records, reports, and "as-built" drawings.

General plant-transmission system (*$177,000*).—These funds are needed to complete the microwave communication system.

System operation and maintenance area.—Completed fiscal year 1955.

Construction cost audit and reclassification.—Completed fiscal year 1955.

Surplus construction property disposal.—Completed fiscal year 1955.

Chairman HAYDEN. This will be a good place to recess, gentlemen.

BUFORD-TRENTON PROTECTION WORKS, NORTH DAKOTA

Senator YOUNG. Mr. Chairman, I would like to know what the $85,232 is for under the Buford-Trenton protection works, and something about the $133,700 in carryover funds or unobligated funds.

What I want to know is what you are going to spend the $85,232 for, and what you will eventually do with the $133,700.

Mr. NIELSEN. I am trying to locate that now, Senator Young.

Mr. Golzé has the answer for you. It is carryover money.

Mr. GOLZÉ. Mr. Chairman, the Buford-Trenton work is being financed out of $300,000 made available under the Missouri River Basin project several years ago. The program for 1956 contemplates an expenditure of $85,232 of which $34,149 will be on the canals, $46,083 will be on laterals, and $5,000 on drainage. There will be some continuing work on laterals and drains in 1957 and some final work on the drains in 1958 which will complete the work.

Chairman HAYDEN. We will excuse you gentlemen until Thursday morning at 10 o'clock.

(Whereupon, at 3:51 p. m., Tuesday, May 31, 1955, the committee recessed to reconvene Monday, June 6, 1955, at 10 a. m.)

PUBLIC WORKS APPROPRIATIONS, 1956

MONDAY, JUNE 6, 1955

UNITED STATES SENATE,
BUREAU OF RECLAMATION AND INTERIOR,
POWER MARKETING AGENCIES SUBCOMMITTEE
OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10:15 a. m., pursuant to call, in room F-37, the Capitol, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden, Senators Ellender, Mundt, and Dworshak.

DEPARTMENT OF THE INTERIOR

BUREAU OF RECLAMATION

STATEMENTS OF E. G. NIELSEN, ASSISTANT COMMISSIONER; N. B. BENNETT, JR., CHIEF, PROJECT DEVELOPMENT DIVISION; F. E. DOMINY, CHIEF, IRRIGATION DIVISION; D. S. CAMPBELL, CHIEF, POWER DIVISION; G. E. TOMLINSON, ASSISTANT CHIEF, PROJECT DEVELOPMENT DIVISION; A. R. GOLZÉ, CHIEF, PROGRAM COORDINATION AND FINANCE DIVISION, BUREAU OF RECLAMATION; AND SIDNEY D. LARSON, DIRECTOR, DIVISION OF BUDGET AND FINANCE, DEPARTMENT OF THE INTERIOR

CENTRAL VALLEY PROJECT

Chairman HAYDEN. I would like to ask a few additional questions on the Central Valley project. What was the amount of the request to the Bureau of the Budget and what was the Bureau of the Budget allowance? What work was affected by the reduction?

Mr. NIELSEN. Mr. Golzé will answer your questions, Mr. Chairman.

BUDGET ALLOWANCE

Mr. GOLZÉ. The request to the Bureau of the Budget was for $25,385,000. The budget allowed $14 million. Over $9,600,000 of the reduction was for the Sacramento canals division. The Budget Bureau did not approve the request of funds for the Red Bluff diversion dam and the Tehama-Colusa canal system. The balance of the reduction was generally distributed over project features.

Chairman HAYDEN. Was the deletion of the Sacramento canal work because of some special situation?

Mr. GOLZÉ. It was primarily because of the repayment situation. We have not completed the negotiation of repayment contracts to cover the work on the Sacramento canals.

EFFECT OF BUDGET REDUCTION

Chairman HAYDEN. Place a statement in the record on the application of the budget reduction on the Central Valley project.

Mr. GOLZÉ. Yes, sir.

(The information requested follows:)

CONSTRUCTION AND REHABILITATION—CENTRAL VALLEY PROJECT

EFFECT OF BUDGET REDUCTION IN FISCAL YEAR 1956 REQUEST

The request for fiscal year 1956 construction appropriations for the Central Valley project submitted to the Bureau of the Budget was $25,385,000. The Bureau of the Budget allowed $14 million, a reduction of $11,385,000. Of this reduction, $9,675,000 was specifically applied to the Sacramento canals unit, with instructions to delete initiation of construction on the Red Bluff diversion dam ($3,475,000) and the Tehama-Colusa Canal ($6,205,000). Three million dollars was allowed for continuation of construction of the Corning Canal. The remainder of the reduction ($1,710,000) was not specifically identified. In adjusting its fiscal year 1956 program to conform to the funds allowed by the Bureau of the Budget, this general reduction was mostly applied to the Friant-Kern distribution systems. It was felt that, because of lack of assurance that certain of the proposed systems would be constructed during the fiscal year 1956, the reduction could be applied here with the least disruption of the project construction program. Other adjustments and revisions of the program were also made to conform to current information and to assure most efficient use of the funds allowed by the Bureau of the Budget.

FISH PROBLEM AT TRACY PUMPING PLANT

Chairman HAYDEN. I understand you have had some difficulty with the fish problem at Tracy pumping plant. Can you tell us about it.

Mr. GOLZÉ. Under the general direction of the Fish and Wildlife Service, experiments have been going on over the past few years as to the best way to handle the fish at the Tracy pumping plant. The problem is essentially one of keeping the fish in the Delta area out of the pumps at the Tracy plant. Conventional screening was tried first and then a type of traveling screen was developed and recently installed on a temporary basis. Recent experiments indicate that a louver-type screen is the most successful in keeping the fish away from the plant. The amount in the estimate for this work for fiscal year 1956 is $1,345,393 which will permit going ahead with the permanent louver-type screen. The work is scheduled to be essentially completed in fiscal year 1957.

Chairman HAYDEN. It appears that progress is actually being made on the fish problem. Now tell us about the distribution system. I understand there has been some trouble with them.

Mr. GOLZÉ. Mr. Chairman, our trouble with the distribution system has been with leaks developing in the concrete pipe installed on the South San Joaquin Municipal Utility District. Numerous leaks have appeared at the joints in the pipe system. Under the construction contract, the contractor is responsible for correcting these leaks, and he has been doing so. Consulting engineers have been employed to give their opinion as to the source of trouble and method of correction. Their reports have been filed with the Office of the Secretary and are under consideration.

Chairman HAYDEN. Thank you. We will now move on to the Missouri River Basin.

Missouri River Basin

The Missouri River Basin was proposed as one project, but we will take up the items separately.

The summary justifications for the Missouri River Basin project will be included in the record.

(The justifications referred to follow:)

Missouri River Basin Project Data

AUTHORIZATION

By the Flood Control Act of December 22, 1944 (58 Stat. 887), as amended by the Flood Control Acts of July 24, 1946 (60 Stat. 641), and May 17, 1950 (64 Stat. 170), and Public Laws 503, 83d Congress, July 16, 1954 (68 Stat. 891), and 612, 83d Congress, August 21, 1954 (68 Stat. 757). Acts through 1950 refer to SD 191, 78th Congress; H. D. 245, 78th Congress; and SD 247, 78th Congress.

LOCATION

The project area is the entire drainage basin of the Missouri River. The basin contains approximately 529,000 square miles, or about one-sixth of the land area of the United States. It covers all or parts of the 10 States of Montana, North Dakota, South Dakota, Wyoming, Nebraska, Colorado, Kansas, Minnesota, Iowa, and Missouri. The last three named States are east of the area of Federal irrigation development.

DESCRIPTION

The project consists of a comprehensive basin plan being constructed jointly by the Bureau of Reclamation and the Corps of Engineers. The ultimate plan proposed contains more than 200 individual projects or units which will provide a coordinated system of reservoirs, canals, and related works for the full development of the water resources of the basin. This basin, long subject to recurring floods and droughts, justified the need for basinwide planning of a system of reservoirs for maximum irrigation, flood control, hydroelectric power, municipal and industrial water, navigation, recreation, and fish and wildlife conservation. In addition to the Bureau of Reclamation and the Corps of Engineers, other Federal agencies including six in the Interior Department are cooperating in the planning and development of the basin.

STATUS

By the end of fiscal year 1955, 26 reclamation units will be either completed or under construction including 20 storage dams, and 5 powerplants. All or part of 19 of these units will be in operation by the end of the same fiscal year as a result of advancement of construction to a point where 16 dams, 4 powerplants, and other facilities will be in use. The overall reclamation plan is about 14 percent complete in the 8 years since construction started in April of 1946. Delays have been encountered by defense cutbacks, wide variations in appropriations, and lack of detailed or advanced planning on which to base actual construction. Partial flood control has been achieved on several main tributaries, and actual irrigation is underway on four units. The transmission grid has been advanced to market power now available and to be completed coincident with the completion of the Missouri River main stem powerplants now under construction by the Corps of Engineers.

REPAYMENT

The entire cost of the comprehensive project that is properly allocable to irrigation, commercial power, and municipal water will be repaid in accordance with reclamation law. Cost properly allocable to flood control, navigation, and fish and wildlife are nonreimbursable. Cost allocated to irrigation and in excess of the water users ability to repay, will be repaid from power revenues. There is currently underway an economic analysis of the entire project. The analysis has not been completed. Much of the basic data prepared for use in the overall analysis has been included in the statements covering the separate divisions and units of the project.

HISTORY OF PROJECT DEVELOPMENT

Initial dates: Planning, preliminary basin-type report prepared in 1944, advance planning, selected units, 1945, construction, 1946.

Construction costs

Original estimated cost	$1,257,645,700
Allocation of cost:	
Flood control	419,300,700
Navigation	97,245,000
Reimbursable	741,100,000
Present estimated cost	[1] 2,693,000,000
Allocation of cost	[2]

[1] Total estimated construction cost, Bureau of Reclamation only. (Estimated obligations $2,686,333,324.) Does not include work of the participating agencies of Interior, or of the Corps of Engineers. Subject to change based on determination of active units.

[2] Allocation of present total estimated construction cost awaiting completion of revised economic analysis.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION WORK TO BE DONE BY DEPARTMENT OF THE INTERIOR]

Summarized financial data

Estimated total obligations		[1] $2,784,283,324
Total obligations to June 30, 1954		391,034,955
Allotment, fiscal year 1955	$40,514,850	
Prior year balance available	4,114,757	
Balance available in subsequent fiscal years	−155,700	
Rescission of funds by Public Law 465, 83d Cong	−1,700,000	
Total obligations, fiscal year 1955		42,773,907
Allotment, fiscal year 1956	$55,954,000	
Prior year balance available	155,700	
Balance available in subsequent fiscal years	−153,468	
Total obligations, fiscal year 1956		55,956,232
Balance to complete		2,294,518,230

[1] Includes other Department of the Interior agencies but excludes future costs on indefinitely deferred units.

Work proposed, fiscal year 1956

The overall Missouri River Basin project fund request is outlined in this consolidated statement. Separate justifications follow for each division or unit now in an active construction stage, the Missouri River Basin investigations to be financed with construction funds, and other Department of the Interior agencies participating in the basin development. Costs and program data for these separate activities are also presented by tabulation.

Continuing divisions and units ($50,906,232).—No new units are scheduled for construction during fiscal year 1956 and all activities under this heading are in connection with construction of 21 divisions and units, 8 of which are lumped into the drainage and minor construction category because of their relatively small programs. The largest portion of the funds requested will be required to make payments on contracts for work now under construction or to be placed under contract as part of the approved program. Among the major features continuing are the canal systems and Lovewell Dam in the Bostwick Division, Glendo Dam and Reservoir of the Glendo unit, the pumping plant of the Helena Valley unit, the main canal for the Sargent unit, and the power transmission grid which is keyed to availability of power from main stem Missouri River powerplants. Major features to be completed in fiscal year 1956 include the Kirwin, Tiber, Pactola, and Webster Dams which will provide for the impoundment of 2,022,700 acre-feet of water now largely uncontrolled, and the Jamestown-Fargo 230-kilovolt lines and substations. Preconstruction work will be active on the irrigation facilities of several units where reservoirs are completed or under construction.

Investigations ($2,500,000).—Funds allotted to this activity will provide for continuing work on the development of plans leading to completion of the Bureau of Reclamation's work in the Missouri River Basin in an orderly fashion with the

goal of optimum utilization of the basin's vast water and land resources. The investigation program is divided between advance planning and basin surveys. When the investigations under basin surveys are sufficiently advanced to delineate separable units and establish the basinwide plan of development, such units are placed in the advance planning subdivisions where more detailed investigations are carried out, preparatory to the start of construction. During fiscal year 1956, advance planning work will be resumed or started on 1 division and 1 unit and continued on 10 such units. The draft of 2 definite planning reports will be completed. During the same period, work will be continued on the survey of 12 river basins, and 1 basin and 1 subbasin reports will be prepared. The investigation-type work is spread over the entire basin area with advance planning work being concentrated in the areas where local interests indicate a willingness to assume a proportionate share of the basin development responsibilities.

Other Interior agencies (*$2,550,000*).—These funds will be reallotted to six participating agencies for continuation of multipurpose development of the Missouri River Basin. While most of the funds expended are for direct benefit of the recipient agency in carrying out the Department of the Interior's coordinated and comprehensive program for the development of the land and water resources, numerous direct benefits are realized by the Bureau of Reclamation and the Corps of Engineers in the way of surveys and streamflow data. Activities to be continued under this heading include the classification and inventory of 20 million acres of public land by the Bureau of Land Management and evaluation of mineral resources by the Bureau of Mines. The Fish and Wildlife Service will continue joint studies with the constructing agencies to insure proper wildlife protective facilities are incorporated in construction plans and specifications. The Geological Survey will collect and analyze basic data on water, land, and mineral resources and prepare maps and reports reflecting these data. Responsibility for a comprehensive plan for conservation, development, and use of outdoor recreational and historical resources will rest with the National Park Service, while the Bureau of Indian Affairs will be responsible for custodianship and management of property for aboriginal tribes residing on 26 Indian reservations.

Missouri River Basin project program, fiscal years 1955 and 1956

Divisions, units, and locations	Estimated total obligations	Obligations to June 30, 1954	Program, current year 1955	Estimated unobligated balance, June 30, 1955	Allotment request, 1956	Total program, 1956	Balance to complete
1. Completed divisions and units:							
Kortes unit, Wyoming	$13,735,254	$13,735,254					
Operation and maintenance during construction	765,583	765,583					
2. Continuing divisions and units:							
Bostwick division, Nebraska-Kansas	48,065,443	17,351,860	$3,825,000		$6,784,000	$6,784,000	$20,104,583
Buford-Trenton protection and improvement work, North Dakota	300,000	70,872	95,428	$133,700		85,232	48,468
Frenchman-Cambridge division, Nebraska	69,702,921	49,043,261	1,000,000		1,500,000	1,500,000	18,159,660
Glendo unit, Wyoming	44,300,000	850,590	1,000,000		6,000,000	6,000,000	36,449,410
Hanover-Bluff unit, Wyoming	3,383,000	209,198	450,000		1,250,000	1,250,000	1,473,802
Heart Butte unit, North Dakota	6,253,000	3,877,779	326,000		200,000	95,000	1,954,221
Helena Valley unit, Montana	11,962,287	273,287	250,000		3,000,000	3,000,000	8,439,000
Kirwin unit, Kansas	18,995,552	11,219,742	3,125,000		1,400,000	1,400,000	3,250,810
Lower Marias unit, Montana	65,837,305	11,087,305	6,100,000		6,500,000	6,500,000	42,150,000
Rapid Valley unit, South Dakota	8,774,901	4,974,968	2,397,933		490,000	490,000	912,000
Sargent unit, Nebraska	16,131,273	906,666	1,000,000		3,300,000	3,300,000	10,924,607
Transmission division, various	312,705,895	69,498,201	12,480,897		16,480,000	16,480,000	214,246,797
Webster unit, Kansas	17,842,404	4,364,500	5,000,000		3,500,000	3,500,000	4,977,904
Drainage and minor construction program	134,454,816	121,342,140	801,258	22,000	500,000	522,000	11,789,418
Total, construction	758,708,797	295,070,369	37,851,516	155,700	50,904,000	50,906,232	374,880,680
3. Units under investigations	1,913,123,690	43,597,730	2,537,694		2,500,000	2,500,000	1,864,488,266
Total, Bureau of Reclamation	2,686,333,324	353,168,936	40,389,210	155,700	53,404,000	53,406,232	2,239,368,946
4. Other Department of Interior agencies:							
Bureau of Land Management	7,048,000	3,543,337	208,622		200,000	200,000	3,096,041
Bureau of Indian Affairs	6,850,000	2,200,479	194,264		150,000	150,000	4,305,257
Geological Survey	63,669,000	25,668,718	1,510,041		1,660,000	1,660,000	34,830,241
Bureau of Mines	5,000,000	1,286,875	113,684		100,000	100,000	3,499,441
National Park Service	8,080,000	2,082,797	187,203		230,000	230,000	5,580,000
Fish and Wildlife Service	7,303,000	3,083,813	170,883		210,000	210,000	3,838,304
Subtotal, other agencies	97,950,000	37,866,019	2,384,697		2,550,000	2,550,000	55,149,284
Grand total	2,784,283,324	391,034,955	42,773,907	155,700	55,954,000	55,956,232	2,294,518,230

Bostwick Division, Nebraska-Kansas

Project Data

LOCATION

In south central Nebraska and north central Kansas, extending from Harlan County Dam to Concordia, Kans., along the Republican River through Franklin, Webster, and Nuckolls Counties in Nebraska, and Jewell, Republic, and Cloud Counties in Kansas.

DESCRIPTION

Consists of a multiple-purpose project to provide irrigation, regulation of stream runoff for flood control in the lower Republican and Kansas River Basin, fish and wildlife conservation, and recreation. Facilities of the project include Harlan County Dam and Reservoir (USCE) with a total storage capacity of 850,000 acre-feet, Lovewell Dam and Reservoir with a total storage capacity of 94,000 acre-feet, 2 diversion dams, canals, subcanals, laterals, drains, and floodway channels for effective irrigation of 86,243 acres of rich bottom and table lands.

STATUS

The total estimated construction cost of the Bostwick division has been decreased from $52,795,000 to $47,373,000. (Anticipated total obligations, $48,065,443.) This reduction has been brought about by the reduction of cost estimates for Lovewell Dam, Franklin Canal, Courtland Canal, and Scandia Diversion Dam.

Construction of the Bureau of Reclamation work in the Bostwick division began in March 1949. Construction of the Courtland Canal, sections 1 and 2; Courtland laterals in Nebraska; Superior-Courtland Diversion Dam; Superior canals and laterals; Franklin Canal, section 1; and part of Franklin laterals, section 1, is complete. As of June 30, 1955, the project will be approximately 44 percent complete.

Construction will be completed during the year on the Franklin Canal, section 2; the balance of the Franklin laterals, section 1; the Naponee Canal and laterals; and the Courtland laterals, section 2. Construction will continue throughout the year on the Courtland Canal, section 3, including the North and Ridge subcanals and laterals. Construction will start during fiscal year 1955 on Lovewell Dam and Reservoir; Franklin Canal, sections 3 and 4; Franklin laterals, section 2; and Courtland Canal, sections 3A, 3B, and 4, and laterals. Preconstruction operations and design will be in progress for the Courtland Canal, section 5, and for the Courtland West, Miller, and White Rock Creek Canals and laterals.

REPAYMENT

Status of repayment contract negotiations

Contracts have been executed with the Nebraska Bostwick Irrigation District and with the Kansas Bostwick Irrigation District No. 2. The Nebraska Bostwick contract has recently been amended to increase the construction obligation. It is anticipated that similar amendments will be negotiated with the Kansas Bostwick District in view of cost increases and changes in plan. Contract negotiations will be required for the Scandia area in Kansas before irrigation development can be accomplished.

Amount to be repaid and repayment period

The distribution system repayment obligation of the Nebraska Bostwick District is $3,105,000; in addition, construction of future drains, estimated to cost $900,000 (included in the project total), will be a district responsibility. The Kansas Bostwick District contract has a distribution repayment obligation of $3,500,000. Payments under the two contracts will be made in 40 years after completion of construction and the close of the 5-year development period. Additional payments will be made by both districts through the construction component in water service charges. The following repayment analysis assumes an amendatory contract consistent with the plan of development for the Kansas Bostwick District and the execution of a contract for the Scandia area.

Repayment of costs allocated to irrigation

Water users	$14,704,000
Missouri River Basin project pooled power revenues	41,683,000
Total [1]	56,387,000

Repayment costs per acre

Federal investment, per acre	$654.00
From water users	170.00
From power revenue	484.00
Annual water user charges:	
Construction	4.28
Operation and maintenance	2.87
Total	7.15
Increased net income per acre resulting from project irrigation (payment capacity)	8.96

[1] Includes $11,310,000 as an allocated share of the Corps of Engineers' Harlan County Reservoir which provides irrigation water plus $409,000 as an allocated share of Missouri River Basin project power investment for supplying pumping energy plus $44,668,000 of total project cost $48,304,000 allocated to irrigation.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1938; advanced planning, 1946; construction, 1949 (March).

Date of functional completion of construction, after fiscal year 1961.

Fiscal year and amount of initial allotment of appropriation for construction: Fiscal year 1949, $2,600,000.

Construction costs

Original estimated cost	$8,104,000
Present estimated construction cost	47,373,000
Transitional development	931,000
Present estimated cost	48,304,000
Allocation of cost:	
Unallocated	8,104,000
Irrigation [1]	44,668,000
Flood control	3,440,000
Fish and wildlife	24,000
Recreation	172,000

[1] Additional allocations to irrigation include $11,310,000 as a share of Corps of Engineers' Harlan County Reservoir and $409,000 as a share of Missouri River Basin project power investment for supplying pumping energy.

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$48,065,443
Total obligations to June 30, 1954		17,351,860
Allotment, fiscal year 1955	$3,600,000	
Prior year balance available	225,000	
Total obligations, fiscal year 1955		3,825,000
Allotment, fiscal year 1956	$6,784,000	
Total obligations, fiscal year 1956		6,784,000
Balance to complete		20,104,583

Work proposed, fiscal year 1956

Harlan County Dam and Reservoir.—This feature was constructed by the USCE.

Lovewell Dam and Reservoir (*$3,472,000*).—Construction work will continue throughout the year on the prime contract for the dam which was awarded on November 22, 1954. Two minor contracts will be completed, and contracts will be awarded for clearing and for relocating gas, telephone and powerlines, and State highway.

Franklin Canal, laterals, and drains (*$1,403,090*).—Construction work will be completed on sections 3 and 4 of the canal and on section 2 of the laterals during the last quarter of the year. This work will complete the Franklin Canal and lateral system and will place this unit in full operation.

Naponee Canal, laterals, and drains.—No work is scheduled for this feature during the fiscal year 1956.

Franklin south side pumping plant, canal, laterals, and drains.—Not scheduled for construction until 1957.

Superior Courtland diversion dam.—Completed and in service.

Superior Canal, laterals, and drains.—Not scheduled for construction until fiscal year 1957.

Courtland (Nebr.) canals, laterals, and drains. No work is scheduled for this feature during the fiscal year 1956.

Courtland (Kans.) canals, laterals, drains, substations, transmission lines, and pumping plant (*$1,732,750*).—Construction on sections 3, 3A, and 3B canals and laterals will be completed during the year. Construction on section 4 canal and laterals will continue during the year, and an award will be made on Miller and White Rock Creek Canals and Miller laterals and on Courtland Canal and laterals, section 5. Field data will be completed on the Courtland west canal and laterals.

Scandia diversion dam, canal, laterals, and drains.—Not scheduled for construction until fiscal year 1958.

Bostwick Floodway Channels (*$55,000*).—Design data for this feature will start and will continue throughout the year. These channels are required to maintain the irrigability of project lands.

General service equipment (*$15,000*).—This amount is required for equipment, tools, and housing for operation of the completed works.

Superior service area.—No work programed in fiscal year 1956.

Lovewell cooperative development.—Not scheduled to start until fiscal year 1957.

Bostwick Division

Chairman Hayden. On Bostwick the estimate is $6,784,000. There has been opposition on the part of some local people to the irrigation features of this division.

What is the situation?

Mr. Nielsen. I think Mr. Dominy can inform us on that.

Mr. Dominy. The opposition started over the starting of construction of Lovewell Dam. It was confined pretty largely to the people that would be flooded out in the reservoir area.

Lovewell Dam was started during fiscal 1955. It will make possible the extension of the irrigation service to the lower portions of the Bostwick division.

Chairman Hayden. They are the people who will be flooded out, just like on every other flood-control project, they have to be compensated.

Mr. Dominy. That is right, sir. In buying them out, they get a fair market value for their land at current prices.

Chairman Hayden. Is there any real complaint below there among irrigators about what they have to pay?

Mr. Dominy. There is one portion of the Bostwick division in Kansas that is not yet included within the irrigation district, and we, of course, cannot say with finality at this time as to whether or not those privately owned dry land, wheat and corn lands, will elect to come into the project.

We have every reason to believe that they will, but at the moment, they have not petitioned into the district and some of the opposition that you are cognizant of did come from letters from landowners in this prospective extension of the Bostwick division in Kansas.

ORGANIZATION OF DISTRICTS

Chairman HAYDEN. It is their privilege to organize a district and make a contract and pay what is required.

Is there water enough for them?

Mr. DOMINY. Yes, sir; there is an adequate water supply and we believe that if those particular lands do not come in that there will be replacement acreage that it is possible to serve.

Chairman HAYDEN. At the present rate, when will the major construction be completed?

Mr. DOMINY. Except for the Scandia portion of the Bostwick, the major works will be completed in fiscal 1957.

Now, the Scandia is the area not yet included within the existing irrigation district and will be served by a separate diversion dam in the river and by works leading out from that diversion structure.

Chairman HAYDEN. Again, I want to ask how much money did you ask of the Bureau for this project, and how much did you fail to get?

BUDGET BUREAU ALLOWANCE

Mr. GOLZÉ. Mr. Chairman, we asked the Bureau for $7,825,000. The Bureau allowed $6,784,000.

Chairman HAYDEN. The cut is about a million dollars.

What do you defer on account of that?

Mr. GOLZÉ. That reduction was applied against the Lovewell Dam, sir.

Chairman HAYDEN. It will delay its construction?

Mr. GOLZÉ. It will delay its completion for possibly as much as another year. It is under construction at the present time. It reduces the amount of money we have available to meet contract earnings.

Chairman HAYDEN. Do you have a good contractor on the job?

Mr. GOLZÉ. Yes, sir.

Chairman HAYDEN. Would it be advantageous to the Government in the long run to keep him working?

Mr. GOLZÉ. Yes, we believe it would, sir. We should have sufficient funds to meet his rate of construction.

POSSIBILITY OF SUPPLEMENTAL

Chairman HAYDEN. If it cannot be done here, would you know by the spring so that you could submit a supplemental estimate?

Mr. GOLZÉ. Yes, sir; at the end of this construction season, we will know how we are making out on the dam. If there is evidence that more funds are required, we can submit to the Budget Bureau an estimate of additional funds for fiscal year 1956.

Chairman HAYDEN. It seems to me that the Government always loses money if it tells a contractor to stop and then start again.

Mr. GOLZÉ. The slowdown procedure of stopping and starting is very inefficient, and costly to the Government.

BUFORD-TRENTON PROJECT, NORTH DAKOTA

Chairman HAYDEN. On this Buford-Trenton, you are just spending available money?

Mr. GOLZÉ. Yes, sir, that is money made available several years ago and carried over.

Chairman HAYDEN. For what are you using that?

Mr. GOLZÉ. For rehabilitation and improvement work on the canal and lateral system.

FRENCHMAN-CAMBRIDGE DIVISION, NEBRASKA

PROJECT DATA

AUTHORIZATION

Flood Control Act of 1944 (Public Law 534), 78th Congress, 2d session.

LOCATION

In southwest Nebraska in Hitchcock, Red Willow, Furnas, and Harlan Counties. Project lands extend from Palisade southeastward along the Frenchman Creek and from Trenton eastward along the Republican River to Orleans. Principal city in the project area is McCook.

DESCRIPTION

The major functions to be performed by the division are irrigation and flood control. Water is impounded by three dams: Trenton Dam on the Republican River, storage capacity of 256,600 acre-feet; Enders Dam on Frenchman Creek, 74,500 acre-feet, and Medicine Creek Dam on Medicine Creek, 92,300 acre-feet. Red Willow Dam (United States Corps of Engineers) on Red Willow Creek, 48,500 acre-feet, is yet to be built for a combined capacity of the four reservoirs of 471,900 acre-feet. Water will be delivered to a service area of 66,254 acres by a system of approximately 220 miles of canals. Trenton Dam discharges water directly into a part of the canal system; the balance of the stored water, along with natural flow, is diverted into the system of canals by 2 diversion dams on the Republican River and 1 on Frenchman Creek. A diversion dam is also proposed for Red Willow Creek.

STATUS

The total estimated construction cost of the Frenchman-Cambridge division has been decreased from $73,243,000 to $69,537,000 (anticipated total obligations, $69,702,921). This decrease is a composite of numerous positive and negative changes. Major items of decreases were those resulting from changes in plan of development for the Meeker-Driftwood and Frenchman Canal and lateral systems.

Construction was initiated on the Frenchman-Cambridge Division with start of work on Enders Dam in March 1947. Enders, Medicine Creek, and Trenton Dams are functionally complete. As of June 30, 1955, all of the Cambridge Canal and lateral system and all of the Bartley Canal and lateral system will be complete and in service. Plans and specifications will be complete for the upper Meeker Canal and for the Riverside Canal and laterals. Field data on the remainder of the Meeker-Driftwood system will be well advanced.

REPAYMENT

Status of repayment contract negotiations

A water service and repayment contract has been executed with the Frenchman-Cambridge District for part of the division's service area. Lands in the Meeker-Driftwood area, not now covered, have successfully petitioned into the district; the action is now awaiting secretarial approval. Initial steps are being taken to negotiate an amendatory contract in view of changes in the plan, which was the basis of district organization, and increased costs. Ultimately, other contracts will be required for the Frenchman Valley area.

Amount to be repaid and repayment period

The current distribution system obligation of the Frenchman-Cambridge District is $2,328,800. This obligation is repayable in 40 years after completion of construction and the close of a 5-year development period. Additional costs will be returned by the district through the construction component in the water service charge. Additional obligations will be assumed by revision of the repayment contract to cover the additional lands included in the district and under new contracts covering the Frenchman Valley area. The ensuing repayment analysis assumes an amendatory contract with the Frenchman-Cambridge District and the negotiation of new contracts in the Frenchman Valley area.

Repayment of costs allocated to irrigation

Water users	$8,304,000
Missouri River Basin project pooled power revenues	50,913,000
Total [1]	59,217,000

[1] See the following table:

Project cost allocated to irrigation	$53,500,000
Bureau of Reclamation share proposed Red Willow Reservoir	5,581,000
Bureau of Reclamation share Missouri River Basin power investment for pumping	136,000
Total allocated to irrigation	59,217,000

Repayment costs per acre [1]

Federal investment, per acre	$893.00
From water users	125.00
From power revenue	768.00
Annual water user charges:	
Construction	3.13
Operation and maintenance	2.30
Total	5.43

[1] Averages computed for total acreage, including lands receiving supplemental water. Increased net income per acre resulting from project irrigation (payment capacity): $9.90.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1939; advanced planning, 1946; construction, 1947.

Date of functional completion of construction: Fiscal year 1960, except for the Red Willow, McCook, and Holbrook Canals and laterals, which are indefinitely deferred.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1947, $1,500,000.

Construction costs

Original estimated cost	$26,894,500
Allocation of cost	Unallocated
Present estimated construction cost	69,537,000
Transitional development	648,000
Amount to be allocated	70,185,000
Allocation of cost:	
Irrigation [1]	53,500,000
Flood control	16,215,000
Fish and wildlife	97,000
Recreation	373,000

[1] Additional allocations to irrigation include $5,581,000 as a share of Corps of Engineers' proposed Red Willow Reservoir and $136,000 as a share of Missouri River Basin project power investment for supplying pumping energy.

Schedule of development

[Acres]

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation:				
Full	11,000	21,275	21,886	65,364
Supplemental	890	890	890	890
Total	11,890	22,165	22,776	66,254

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$69,702,921
Total obligations to June 30, 1954		49,043,261
Allotment, fiscal year 1955	$1,000,000	
Total obligations, fiscal year 1955		1,000,000
Allotment, fiscal year 1956	$1,500,000	
Total obligations, fiscal year 1956		1,500,000
Balance to complete		18,159,660

Work proposed, fiscal year 1956

Completed facilities.—Completed in fiscal year 1955 of prior years.

Deferred facilities.—Deferred until fiscal year 1957 and future years.

Trenton Dam and Swanson Lake ($30,000).—Program for fiscal year 1956 for liability of Government for deferred maintenance on C. B. & Q. Railroad relocation.

Cambridge diversion dam, canal, laterals, and drains ($40,000).—The program for the fiscal year 1956 will place under construction the required farm outlet drains for lands under the Cambridge Canal. This is the minimum program of drainage provisions that can be undertaken under the terms of the existing Frenchman-Cambridge repayment contract. The major part of the drainage feature, constituting subsurface drainage, will remain in an indefinitely deferred status.

Bartley diversion dam, canal, laterals, and drains ($40,000).—The program for the fiscal year 1956 will place under construction the required farm outlet drains for lands under the Bartley Canal. This is the minimum program of drainage provisions that can be undertaken under the terms of the existing Frenchman-Cambridge repayment contract. The major part of the drainage feature, constituting subsurface drainage, will remain in an indefinitely deferred status.

Meeker-Driftwood temporary diversion dam, canals, laterals, and drains ($921,930).—During the fiscal year 1956 compilation of field data will be completed and preparation of plans and specifications will be initiated for Driftwood Canal, Driftwood Subcanal, Meeker Canal Extension, Driftwood sublaterals, Meeker extension laterals, and the remainder of Meeker-Driftwood lateral system (outside present irrigation district). Compilation of field data, preparation of plans and specifications, and an award of contract are anticipated for the upper Meeker Canal and the upper Meeker Subcanal.

Frenchman diversion dam, canal, laterals, drains, and floodways ($400,000).—During the fiscal year 1956 construction will be started and completed on the Riverside Canal and laterals. This is a small portion of the Frenchman unit canal and lateral system, which lies within the boundaries of the existing Frenchman-Cambridge Irrigation District. Field data will be completed on the Culbertson Canal and laterals.

Chairman HAYDEN. The next one is the Frenchman-Cambridge division.

What is the repayment situation on that project?

Mr. DOMINY. We have a repayment contract with the Frenchman-Cambridge Irrigation District, but part of the work that is involved here in our 1956 proposal will bring water to additional areas not now

in the district in what is known as the Frenchman Valley area, and we are working with them and have a form of contract in their hands for consideration.

We need to expand the district and increase the repayment coverage in order to justify going ahead with the program we have here in fiscal 1956.

Chairman HAYDEN. What was your request to the Bureau of the Budget?

BUDGET ALLOWANCE

Mr. GOLZÉ. We asked for $2 million and were allowed $1,500,000.

The work that was cut out by the reduction was the Meeker-Driftwood Canal and lateral system.

Chairman HAYDEN. That is where you did not have a contract?

Mr. GOLZÉ. That is right, it was starting a new item of work.

UNOBLIGATED BALANCE, BUFORD-TRENTON

Senator ELLENDER. Mr. Chairman, I wonder why it was that the $133,700 unobligated balance of this Buford-Trenton project was not spent?

Mr. DOMINY. I would like to clear that up, Mr. Chairman.

Part of the problem there deals with whether or not the Garrison Dam will be operated at the 1,850-foot-elevation level or not. If Garrison Reservoir of the Army farther downstream on the Missouri is operated at elevation 1,850, it will actually bring water into the lower one-third of the Buford-Trenton project.

We have been delaying that protective work until we know whether the best deal for the Government might be for the Army to buy out the whole lower end of the Buford-Trenton project.

That is being considered now by the Army and they have shown that it would be more economical than to build the dikes and pumps that would be required to protect that lower part of the Buford-Trenton.

As soon as that decision is made, we have money previously appropriated with which to protect the remaining two-thirds of the Buford-Trenton project against certain encroachments.

Senator ELLENDER. If the lower third is purchased you will have to use this money, at any rate?

Mr. DOMINY. The reimbursable portion would still have to be used. Not all of the nonreimbursable portion would need to be used.

GLENDO UNIT, WYOMING

PROJECT DATA

LOCATION

Glendo dam and powerplant will be located on the North Platte River approximately 6 miles southeast of Glendo, Wyo. Fremont Canyon powerplant will be located between the backwater of Alcova Reservoir and Pathfinder Dam.

DESCRIPTION

The principal feature of this unit will be Glendo Dam which will create a reservoir of 800,000 acre-feet capacity to conserve 70,000 acre-feet of runoff which at present cannot be impounded and is lost due to the lack of facilities to store seasonal gains, including anticipated return flows from irrigation developments to the river. The reservoir will also alleviate silting problems inasmuch as

Guernsey Reservoir, due to a deposition of silt, is decreasing in capacity at the rate of 1,200 acre-feet per year. A powerplant of 24,000-kilowatt capacity will be constructed in connection with Glendo Dam, which will provide electrical energy during the summer months when it is uregntly needed. The Fremont Canyon powerplant will also be constructed as an integral part of the unit for generation of 48,000 kilowatts of power. The generation of power at Fremont as well as additional generation at the Alcova powerplant of the Kendrick project is made possible by providing space in Glendo Reservoir for reregulation of upstream releases.

STATUS

The total estimated cost of Glendo unit has been decreased from $50,859,000 to $44,300,000. This decrease has come about by using more accurate field data and specification quantities.

A contract for the construction of the Glendo dam and powerplant was awarded November 27, 1954. As of June 30, 1955, construction of Glendo Dam will be well underway. Field design data has been completed for the Fremont Canyon plant.

REPAYMENT

Repayment for the cost of this project will be made from the sale of electrical energy and irrigation water in accordance with reclamation law and provisions as authorized by Congress.

HISTORY OF PROJECT DEVELOPMENT

Initial date:
Planning, 1944.
Advance planning, 1947.
Construction, 1954.

Date of functional completion of construction, fiscal year 1961.

Fiscal year and amount of initial allotment of appropriations for construction, fiscal year 1955, $1 million.

Construction costs

Original estimated cost	[1] $44,000,000
Allocation of costs	[2]
Present estimated cost	44,300,000
Tentative allocation of costs:	
Irrigation	3,418,000
Power	34,401,000
Flood control and navigation	6,004,000
Fish and wildlife	477,000

[1] S. Doc. 191.
[2] Unallocated.

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation system: Irrigation acreage for service				
supplemental				40,000
Total				40,000
Power (kilowatts)				72,000
Power rates (mills per kilowatt-hour):				
Firm at 50-percent load factor				5.5
Nonfirm (average)				3.0
Irrigation pumping				2.5

ESTIMATES FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$44,000,000
Total obligations to June 30, 1954		850,590
Allotment, fiscal year 1955	$1,800,000	
Total obligations, fiscal year 1955		1,800,000
Allotment, fiscal year 1956	$8,120,000	
Total obligations, fiscal year 1956		8,120,000
Balance to complete		33,229,410

Work proposed, fiscal year 1956

Glendo Dam and Reservoir ($6,120,000).—Construction of the dam and power tunnel will continue and progress payments will be made on a prime contract awarded November 27, 1954. Completion on this contract is anticipated during fiscal year 1958. Funds are also required to initiate a contract for relocation of 5.96 miles of the C. B. & Q. Railroad and to procure land and land rights for the Glendo Reservoir area.

Glendo powerplant ($1,150,000).—Work will continue under the prime contract awarded November 27, 1954, and progress payments will also be made on materials contracts to be awarded late in fiscal year 1955. Construction of the powerplant is coordinated with the schedule of completion of the dam.

Fremont Canyon powerplant ($200,000).—Collection of field design data will be completed and preparation of final designs and specifications will be initiated.

Glendo switchyard, 115 kilovolts ($50,000).—Designs will be completed, specifications issued, and contracts awarded for the purchase of equipment.

Fremont Canyon switchyard.—No construction activity scheduled until fiscal year 1959.

Glendo general property.—No funds requested until fiscal year 1958.

Fremont Canyon general property.—No funds requested until fiscal year 1959.

Chairman HAYDEN. The budget estimate on the Glendo unit was $6 million plus $2,120,000 transferred from the Lower Marias unit, a total of $8,120,000.

You also reprogramed $800,000 of 1955 funds to provide a total of $1,800,000 for the current year.

Was that your initial request to the Bureau of the Budget?

Mr. GOLZÉ. Mr. Chairman, our initial request to the Bureau of the Budget on the Glendo unit was $6 million for fiscal year 1956 and they allowed that in full.

Chairman HAYDEN. Instead of taking this Lower Marias money and applying it to Glendo, why did you not apply it on some of the other places where your money was cut?

Mr. GOLZÉ. In the judgment of the Department and the Bureau, Glendo was the unit that needed the money most. The construction contract had been awarded. It is a good contract and the contractor was moving ahead; there is urgent need for additional funds for that unit in fiscal year 1956.

Senator ELLENDER. Are we to understand that they allowed $2,120,000 above what they requested?

Chairman HAYDEN. Apparently they requested $6 million.

Senator ELLENDER. They got $8,120,000.

Mr. GOLZÉ. Senator Ellender, the additional amount is a reprograming that has been cleared and approved by the Bureau of the Budget.

We have been authorized to present it to the Appropriations Committees. There was need for less money on another unit of the Missouri Basin, the Lower Marias unit, so that money was transferred to the Glendo.

Chairman HAYDEN. This was one lump sum. What was the trouble on the Lower Marias so that you could not get a contract?

Mr. DOMINY. We had originally contemplated serving 127,000 acres through the Tiber Dam. We actually got an irrigation district formed covering 87,000 acres, but dryland wheat prices and rainfall have been good and they have not gotten to the point of organizing for a repayment contract, and we felt that we could not justify going ahead with the distribution system without the repayment contract.

Chairman HAYDEN. You are perfectly correct in that.

HANOVER-BLUFF UNIT, WYOMING

PROJECT DATA

AUTHORIZATION

Flood Control Act of 1944 (58 Stat. 887).

LOCATION

The Hanover-Bluff unit is located in Washakie County in northwestern Wyoming and lies along the Bighorn River south of the town of Worland. The unit will derive water from the Bighorn River and releases the Boysen unit which has been completed and is in service.

DESCRIPTION

The primary purpose of the unit is to provide a full water supply to 7,395 acres of irrigable land; 6,153 acres in the Highland Hanover area, and 1,242 acres in the Bluff area. Facilities include 6 pumping plants, 18.2 miles of new canal and 20.5 miles of rehabilitated and enlarged canal, 19.2 miles of laterals, 6 substations and 10 miles of transmission line.

The total estimated construction cost of the Hanover-Bluff unit has been decreased from $3,333,000 to $3,303,000 (anticipated obligations $3,383,000) due to a change in the treatment of transitional development costs. In December 1953, certification as to the adequacy of the land classification was made by the Secretary of Interior. Court orders establishing irrigation districts were signed on June 5, 1954. Definite plan reports for the unit were approved for construction by the Commissioner of Reclamation during fiscal year 1954. During fiscal year 1955 designs and specifications for the pumping plants, canals, and laterals will be completed and contracts executed. Construction was initiated on November 4, 1954.

REPAYMENT

Status of repayment

The Upper Bluff and Highland Irrigation Districts have approved the form of water service and repayment contracts. These contracts are scheduled to be submitted to the Secretary of the Interior for approval as to form in February 1955. Both contracts are expected to be executed prior to the close of fiscal year 1955. Construction work on distribution systems will not be initiated until repayment contracts have been executed.

	Hanover	Bluff	Total
Repayment costs allocated to irrigation:			
Water users	$571,000	$176,300	$747,300
MRBP surplus revenues	2,053,000	582,700	2,635,700
Total	2,624,000	759,000	3,383,000
Repayment costs per acre:			
Federal investment	414	609	447
From power revenues	321	471	349
From irrigators (40 years)	93	138	98
Annual water-user charges:			
Construction	2.32	3.55	2.53
Operation and maintenance	4.02	3.83	3.99
Total	6.34	7.38	6.52
Estimated gross crop income per acre resulting from proposed irrigation (at long-term projected prices)	53.89	62.05	55.26

HISTORY OF PROJECT DEVELOPMENT

Initial data: Planning, 1942; advanced planning, 1953; construction, 1955.
Date of functional completion of construction, fiscal year 1957.
Fiscal year and amount of initial appropriation for construction, fiscal year 1955, $293,000.

Construction costs

	Hanover	Bluff	Total
Original estimated construction cost	$487,000	$100,000	$587,000
Allocation of cost: Irrigation	487,000	100,000	587,000
Total construction cost	2,562,000	741,000	3,303,000
Transitional development	62,000	18,000	80,000
Present estimated cost	2,624,000	759,000	3,383,000
Allocation of cost: Irrigation	2,624,000	759,000	3,383,000

Schedule of development

[Acres]

	Hanover	Bluff	Total
Fiscal year—			
1955			
1956			
1957	6,153	1,242	7,395
Ultimate	6,153	1,242	7,395

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$3,383,000
Total obligations to June 30, 1954		209,198
Allotment, fiscal year 1955	$450,000	
Total obligations, fiscal year 1955		450,000
Allotment, fiscal year 1956	1,540,000	
Total obligations, fiscal year 1956		1,540,000
Balance to complete		1,183,802

WORK PROPOSED, FISCAL YEAR 1956

Highland-Hanover area

Pumping plants, canals, and conduits ($947,402).—Contracts will be awarded in February of fiscal year 1955 for the four pumping plants on the Highland-Hanover area, and in September 1955 for the Highland-Hanover Canal. The Hanover Irrigation District started work in November of fiscal year 1955 on rehabilitation of the main canal for the Highland-Hanover and Bluff areas. These funds will be required to support the activities of the contractors at an efficient and economical rate.

Hanover laterals ($76,573).—Contract for the construction of these laterals will be awarded early in fiscal year 1956. Funds are required for payment on this contract and supporting activities.

Hanover Drains ($2,000).—In order to maintain a complete record of ground-water table before and after introduction of water on the new area, it is necessary to read the ground-water wells that were constructed in fiscal year 1955; therefore these funds are required for this work.

Hanover distribution lines and substation ($75,610).—These funds are required for progress payments under contracts for construction of 8.85 miles of 34.5-kilovolt distribution lines and 4 substations which will be awarded in fiscal year 1955.

Hanover Farm unit development ($2,000).—For initiation of studies to permit orderly layout of units concurrently with completion of irrigation facilities.

Upper Bluff area

Pumping plants, canals and conduits ($251,183).—These funds are for progress payments on contract for construction of two pumping plants to be awarded in fiscal year 1955 and which will continue throughout fiscal year 1956 for progress payments to Bluff Irrigation District for continued payment on contract earnings on the interconnected canal between the Hanover and Bluff Canals which

will be awarded late in fiscal year 1955, and for payments to irrigation district for canal enlargement.

Bluff laterals ($128,095).—These funds are required for the purpose of initiating construction on the lateral system in the Upper Bluff area.

Bluff drains ($2,000).—In order to maintain a complete record of ground-water table before and after introduction of water on the new area, it is necessary to read the ground-water wells which were constructed in fiscal year 1955. These funds are for this purpose.

Bluff distribution lines and substations ($25,103).—These funds are required for progress payments on contracts for 1 mile of distribution line and two 150-kilovolt-ampere substations, which will be awarded in fiscal year 1955.

Bluff Farm unit development ($1,000).—For initiation of studies to permit orderly layout of unit concurrently with completion of irrigation facilities.

The next is the Hanover-Bluff unit in Wyoming.

There was an original budget estimate of $1,250,000. You transferred $290,000 from the Lower Marias.

Does this increase in estimate speed up the construction of the project?

Mr. GOLZÉ. Yes, sir; that will permit the work to move along at a more economical rate.

Chairman HAYDEN. Are you getting a repayment contract signed?

Mr. DOMINY. Yes, sir; we have repayment contracts.

HEART BUTTE UNIT, NORTH DAKOTA

PROJECT DATA

LOCATION

The unit is located in Grant and Morton counties in southwestern North Dakota. It extends east along Heart River for about 60 miles to the city of Mandan.

DESCRIPTION

Facilities of the unit are designed to provide full water supply for 13,100 acres of irrigable land, together with much needed flood protection for the city of Mandan and low-lying farmland in that vicinity. Irrigation of the land below Heart Butte Dam will be accomplished by lifting water from the river channel to the separate tracts of land by means of small pumping plants, ranging in size from 3 to 50 cubic feet per second capacity. A system of canals and laterals will deliver water to the irrigable land. Several relift pumping stations are also included in the plant of development.

Lands to receive water under this development were organized into the original Heart River District. Interest in the irrigation, however, was insufficient and a contract essential to the construction of certain supply and distribution systems was never executed. The original district was dissolved by court order and in 1954 a new district, comprising approximately 2,537 acres in the western third of the area, was organized and undertook negotiation of a suitable contract. This contract was offered to the electorate late in 1954 and was favorably voted although a sizable segment of the electorate opposed the contract.

STATUS

The total estimated construction cost has increased from $6,223,400 to $6,322,600 (total anticipated obligations $6,253,000). The net increase is due mainly to the decision that the distribution lines and substations to provide power for the pumping plants be carried as a part of the Heart Butte unit, instead of part of the transmission division, and a decrease due to the change from fixed to portable-type pumping plants to serve the western portion of the unit.

Heart Butte Dam was substantially completed in December 1949. Flood-control benefits were first realized in the spring of 1950 when the dam, and levees at Mandan, prevented flood damage estimated at nearly $2,644,000, or about two-thirds of the construction cost of both features.

A few farmers are irrigating prior to completion of Bureau-designed facilities. Detailed land classification has been completed and was certified to by the Secre-

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tary on October 16, 1952. Technical assistance, in cooperation with the Extension Service, has been furnished to landowners who are developing irrigation.

Specifications have been issued for construction of pumping plants and laterals and for pumps, motors, and electrical equipment. Award of contracts is anticipated early in February 1955, with construction to start as soon thereafter as weather permits.

REPAYMENT

A repayment contract was approved as to form and agreed upon with the irrigation district board in 1949. Opposition to irrigation developed, however, and court actions followed. Many of those concerned with the development soon agreed that a different approach was needed. Hearings were held to learn the wishes of the landowners and a report of findings was prepared. Petitions were signed requesting exclusion of a substantial part of the acreage from the original district and asking for formation of a new one. Organization of a new district was approved by election December 8, 1953. By another election December 10, 1954, the water users of the western third of the unit accepted a new contract, and on December 20, 1954, it was signed by the district board. Confirmation of the contract by the district court is anticipated in late January 1955.

Repayment costs allocated to irrigation

Water users	$890,800
Missouri River Basin project surplus revenues	3,708,200
Total	4,599,000

Repayment costs per acre

Federal investment per acre	$351.00
From water users	68.00
From Missouri River Basin project power revenues	283.00
Annual water users charges:	
Construction	1.70
Operation and maintenance	.30
Total	2.00

HISTORY OF PROJECT DEVELOPMENT

Initial data: Planning, 1903; advance planning, 1946; construction, 1947.

Date of functional completion of construction: Fiscal year 1959.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1947, $740,000.

Construction costs

Original estimated cost	$2,497,280
Present estimated construction cost	6,322,600
Transitional development	82,400
Total project cost	6,405,000
Allocation of cost	Unallocated
Allocation of costs:	
Irrigation	4,599,000
Flood control	1,795,000
Recreation	11,000

Schedule of development

Irrigation (system) full:	
Through fiscal year 1954	70
Fiscal year 1955	70
Fiscal year 1956	2,537
Ultimate	13,100

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$6,253,000
Total obligations to June 30, 1954		3,877,779
Allotment, fiscal year 1955	$300,000	
Prior year balance available	26,000	
Total obligations, fiscal year 1955		326,000
Allotment, fiscal year 1956	$200,000	
Balance available in subsequent years	−105,000	
Total obligations, fiscal year 1956		95,000
Balance to complete		1,954,221

Work proposed, fiscal year 1956

Heart Butte Dam and Reservoir.—Completed in prior years.

Pumping plants and laterals, western portion, initial development ($85,906).—Construction will be completed in the first 4 or 5 months of the fiscal year under contracts expected to be awarded early in February 1955. Delivery of the pumps and other equipment is anticipated by the end of fiscal year 1955. These facilities will furnish water to the 2,537 acres in the Western Heart River Irrigation District, with initial water to be available in the spring of 1956.

Pumping plants and laterals, western portion, deferred developments.—Deferred pending reorganization of the district and completion of repayment negotiations:

Pumping plants, canals, and laterals, eastern portion.—All activity on this item deferred until future years, dependent on development of need.

Pumping plants and laterals, central portion.—All activity on this item deferred until future years, dependent on development of need.

Drains ($2,000).—Construction of drains required for the initial development of the western portion will be completed.

Development farm.—Completed and in operation.

Distribution lines and substations ($73,000).—Contracts to be awarded in February 1955 for payment to Mor-Gran-Sou Electric Cooperative for Bureau portion of joint facilities and for equipment and construction of facilities, to provide power for irrigating the acreage in the Western Heart River Irrigation District, will be completed in the first half of the fiscal year. Specifications will be issued and construction started on facilities, later in the year, to serve the rest of the acreage in the western third of Heart Butte unit if the status of district reorganization and repayment negotiations justifies this action.

General property ($15,000).—The work of establishing trees and shrubs in the wildlife habitat areas at Heart Butte Reservoir will be continued. Acquisition of service equipment for operation and maintenance of completed irrigation facilities is provided for.

Chairman HAYDEN. Next is the Heart Butte in North Dakota, total estimate of $200,000.

It is noted that "Balance to be available in subsequent years, $105,000."

Will you explain this statement?

Mr. GOLZÉ. The 1956 program, sir, will require $95,000. The budget estimate is $200,000. That gives us $105,000 that will not be required in fiscal year 1956 on this unit.

Chairman HAYDEN. You would not require it on the unit at all?

Mr. GOLZÉ. No, sir.

Chairman HAYDEN. The funds in excess of your needs on this unit will be used on other units in the Missouri River Basin?

Mr. GOLZÉ. Yes; that is right.

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REPAYMENT SITUATION

Chairman HAYDEN. What is the repayment situation on that unit?

Mr. DOMINY. This is another of those projects where an irrigation district was formed covering the entire 13,000 acres proposed for development below Heart Butte Dam and on the basis of a resolution from their officials that they would sign a contract, we went ahead and built the Heart Butte Dam a number of years ago. When it came down to actually making the transition from dryland farming to irrigation farming, they could not get a majority of the farmers to support the contract, and they could not get a contract.

So they disbanded the 13,000-acre district and a year ago formed a new district which comprises only 2,500 acres immediately below the dam, and in this area every landowner did indicate that he wanted to irrigate.

So we are proceeding now with the installation of the pumps to serve the 2,500 acres in the Western Heart River Irrigation District and for the moment abandoning any plan to irrigate the remaining acres.

ORIGINAL PURPOSE OF DAM

Chairman HAYDEN. What was the original purpose of the Heart Butte Dam?

Mr. DOMINY. For flood control as well as to provide irrigation water for 13,000 acres.

As a matter of fact, the first year after the dam was completed, the flood-control benefits alone are estimated to have been more than the construction cost of the dam.

Chairman HAYDEN. I recollect some testimony about very serious floods in the area below, and this does correct that?

Mr. DOMINY. Yes; this does a very fine job of assisting with the flood control protection for the city of Mandan and the railroad that parallels that river.

Senator ELLENDER. How much more will this increase cost to the Government since the number of acres has been so drastically reduced?

Mr. DOMINY. As a matter of fact, Senator Ellender, in this particular unit as well as most of the Missouri Basin units, the irrigation farmer will not pay the full costs of the distribution system.

The power system will pick up the balance; so, to the extent that we do not build the 13,000 acres, we actually decrease the burden that would be placed upon the power system.

Senator ELLENDER. Are we to understand that in the development of the project so much is chargeable to reclamation, so much to flood control?

Mr. DOMINY. That is right, sir.

Senator ELLENDER. And so much to power?

Mr. DOMINY. That is right, sir.

Senator ELLENDER. Are we to further understand that if the reclamation project is not met in toto as planned, that that is going to be assumed by the power development?

Mr. DOMINY. In the case of the Heart Butte unit, Senator Ellender, the cost of the dam is entirely either flood control allocation or will be paid from power revenues.

Senator ELLENDER. Well, will you increase the amount of contribution for flood control?

Mr. DOMINY. No, sir. But when we build the distribution system, the cost of which is beyond the ability of the irrigation water users to pay, it means that if we go ahead with the distribution system, it increases the amount of money that must be picked up from power revenues.

Even though it is allocated to irrigation, the cost above water user repayment is paid from the power revenues of the Missouri River Basin.

Senator ELLENDER. So that your testimony is that even though the acres that were proposed to be irrigated have been lessened a great deal, that it will not cost the Government any more money but, to the contrary, this loss, if there be any, would be taken over by the power development?

Mr. DOMINY. It would be paid from power revenues, that is right, sir.

HELENA VALLEY UNIT, MONTANA

PROJECT DATA

LOCATION

In central Montana in Lewis and Clark County adjoining the city of Helena and 3.5 miles west of Canyon Ferry Dam.

DESCRIPTION

Helena Valley unit will consist of a pumping plant at Canyon Ferry Dam, a tunnel leading to a canal emptying into a regulating reservoir, a main canal circling the valley, and a lateral and drainage system. A full water supply will be furnished to 13,008 acres, of which 7,775 acres are dry land and 5,233 acres are now inadequately served by existing works which are to be abandoned. In addition a supplemental supply will be provided for 4,623 acres.

STATUS

The total construction cost estimate was decreased from the previous $11,988,000 to $11,924,000 (anticipated total obligations $11,962,287), due to the transfer of "Settlers assistance and future year capacity provisions" from the construction estimate.

On June 30, 1954, the unit was 2.3 percent complete and by the end of fiscal year 1955 will be 4.4 percent complete. At the end of the fiscal year, contracts will have been awarded for construction of the tunnel and for hydraulic machinery for the pumping plant, subject to compliance with the requirements of Public Law 663, 83d Congress, that initiation of construction is dependent on execution of a repayment contract. Plans and specifications will be ready for issuance for construction of the pumping plant. Collection of design data on all other features will be underway.

REPAYMENT

Status of repayment contract negotiations:

A sponsoring organization composed of local interests representing water users and the Helena Chamber of Commerce has started work on organization of an irrigation district. A draft of a repayment contract has been approved by the Commissioner. During fiscal year 1955 an irrigation district will be formed and the repayment contract is scheduled to be presented to the water users and executed.

Amount to be repaid and repayment period

Total construction cost	$11, 924, 000
Transitional development	65, 000
Total unit cost	11, 989, 000

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A draft of a 40-year repayment contract, with a 5-year development period was approved by the Commissioner on November 5, 1954, for use in the formation of an irrigation district. The contract provides for repayment of $832,000 of construction costs from full supply lands assigned for repayment by irrigation in a 40-year period. An additional contract may be considered to provide a water supply for 4,623 acres needing supplemental water.

All project revenues are consolidated to achieve projectwide payout of reimbursable construction costs. No specific allocations have been shown to other than irrigation in the tentative allocation other than the $6,000 specific costs to recreation.

Repayment of total costs allocated to irrigation

Water users	[1] $1, 544, 000
Surplus revenues, Missouri River Basin project	10, 439, 000
Total	11, 983, 000

[1] Anticipated revenues from both full and supplemental supply lands for a period of only 40 years.

Repayment costs per acre

Federal investment per acre [1]	$680. 00
To be repaid—	
From water users [1]	88. 00
From surplus Missouri River Basin project revenue	592. 00
Annual water user charges: [2]	
Construction	1. 60
Operation and maintenance	3. 80
Total	5. 40

[1] Total acreage, 17,631.
[2] Full supply land, 13,008.

Increased net income per acre resulting from project irrigation (payment capacity) is $6.21 for full service land and $3.85 for supplemental service land.

HISTORY OF PROJECT DEVELOPMENT

Initial data: Planning, 1933; advanced planning, 1952; construction, 1955.

Date of functional completion of construction: Fiscal year 1959.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1955, $250,000.

Construction costs

Original estimated cost	$1, 896, 000
Allocation of cost: unallocated	1, 896, 000
Present estimated cost:	
Total construction cost	11, 924, 000
Transitional development	65, 000
Total costs	11, 989, 000
Tentative allocation of cost:	
Irrigation	11, 983, 000
Recreation	6, 000

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (system) irrigable acreage for service:				
Full				13,008
Supplemental				4,623
Total				17,631

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$11,962,287
Total obligations to June 30, 1954		273,287
Allotment, fiscal year 1955	$250,000	
Total obligations, fiscal year 1955		250,000
Allotment, fiscal year 1956	$3,000,000	
Total obligations, fiscal year 1956		3,000,000
Balance to complete		8,439,000

Work proposed, fiscal year 1956

Helena Valley Dam and regulating reservoir ($160,000).—A contract will be awarded in the third quarter for construction of the feature. Land and land rights will be acquired.

Helena Valley pumping plant ($945,000).—Construction of the pumping plant will be initiated early in the year. Funds are also required for payments to material suppliers for contracts already in effect and to be awarded.

Helena Valley tunnel, canals, and monolithic concrete siphons ($1,848,000).—Construction will be continued under the contract for construction of the tunnel. Design data will be completed and a contract awarded for the reach of canal leading from the tunnel to the regulating reservoir and for the concrete siphons. Design data will be completed for the remainder of the main canal for which construction is scheduled to start in fiscal year 1957.

Lateral system ($14,000).—Collection of design data will be continued. Construction of laterals associated with the first block of land to be irrigated is scheduled for fiscal year 1957.

Drainage system ($20,000).—Collection of design data will be continued through the year with completion and initiation of construction scheduled for fiscal year 1957.

General property (camp and equipment).—No construction is scheduled until fiscal year 1958.

General property (recreational facilities).—All activity on this item deferred until future years.

Chairman HAYDEN. How about the Helena Valley unit in Montana? There is a proposal in the budget that no part of that appropriation be used to initiate construction of the Helena Valley unit in Montana until a repayment contract has been executed.

Are you having any trouble in getting a contract?

Mr. DOMINY. We have not finished the organization of the irrigation district as yet, Mr. Chairman.

In Montana just last week, the State officials held the required hearing under Montana law to review the petitions for the formation of a district. It is a little complicated, in that part of the lands to be served are dry land at the moment, and have never been under irrigation. Additional areas have had some irrigation in the past, an inadequate supply, and would be provided with a supplemental supply under the Helena unit. There is some problem of getting those 2 groups together and in 1 organization.

Chairman HAYDEN. Well, in the meantime, you are not going to spend any money until they do?

Mr. DOMINY. That is right, the law is specific and the limitation is specific, and we are not authorized to proceed until that district is formed and a satisfactory contract completed.

Chairman HAYDEN. All you can do is hold out to them that if they do come to an accord, there is some money available to carry on the work?

Mr. DOMINY. That is right, sir.

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Senator ELLENDER. Are we to understand, then, that none of this money is going to be spent until the Government is assured of recovering it all if it does spend it?

Mr. DOMINY. That is right. The repayment contract in this case, as I mentioned a moment ago for Heart River, would only recover a modest proportion from the water users. The balance would come from power revenues but we will not start the work until there is a contract.

Senator ELLENDER. Is this entire sum to be spent for irrigation? I am talking about the Helena Valley unit now. There is no power involved in that; is there?

Mr. DOMINY. No, sir; but it is part of the overall Missouri Basin plan and power revenues would be assigned to help pay out this particular unit.

Senator ELLENDER. You mean pay out under what conditions?

Mr. DOMINY. The total cost of this unit is a Federal investment of $680 per acre of which we expect to get back under our repayment contract $88 per acre and the balance of $592 per acre as given on page 69 of the justification would be recovered from the overall power revenues of the Missouri Basin.

Senator ELLENDER. With interest?

Mr. DOMINY. The power portion of the Missouri Basin allocation is repaid with interest. Any subsidy of the irrigation allocation paid by power is without interest.

Senator ELLENDER. That is 40 years; is it not?

Mr. DOMINY. Yes, it would be a 40-year repayment contract.

KIRWIN UNIT, KANSAS

PROJECT DATA

LOCATION

In north central Kansas along the North Fork of the Solomon River in Phillips, Smith, and Osborne Counties. The project lands extend from Kirwin Dam, adjacent to the town of Kirwin, Kans., southeastward to Portis, Kans.

DESCRIPTION

Consists of the multiple-purpose Kirwin Dam and Reservoir of 315,000 acre-feet capacity and the canal, lateral, and drainage systems required to serve 11,500 irrigable acres. Unit lands will be served by a canal system originating at the irrigation outlet works in the dam. The Main Canal, serving lands on the north side of the river, will extend to the approximate midpoint of the unit, where it divides into North and South Canals. The North Canal continues along the north side to supply that area; the South Canal siphons across the river to serve irrigable acres on the south side.

STATUS

The total estimated construction cost of the Kirwin unit has been decreased from $20,474,000 to $19,066,000 (anticipated total obligations, $18,995,552.) Of this decrease, $1,134,000 is on Kirwin Dam and Reservoir, $274,000 on irrigation facilities. The decrease on dam cost is realized by substituting actual quantities and unit costs for previously estimated costs and lowering of contingency allowances in view of advanced stage of construction. Refinement of the irrigation facilities estimate was based on availability of more detailed design data.

Construction of Kirwin Dam started March 19, 1952. As of June 30, 1955, this feature will be 97 percent complete and the unit as a whole approximately 75 percent complete. Plans and specifications will be complete for Kirwin Main and North Canals and laterals.

REPAYMENT

Status of repayment contract negotiations

The Kirwin Irrigation District has been formed and executed a water service and repayment contract on June 9, 1953.

Amount to be repaid and repayment period

The 40-year repayment contract, with a 5-year development period, provides that the district will repay not to exceed $1,500,000 toward distribution system costs in addition to assumption of cost of construction of subsurface drains. Additional construction costs will be returned by irrigation through the construction component in water service charges.

Repayment of costs allocated to irrigation

Water users	$2,020,000
Missouri River Basin project pooled power revenues	5,821,000
Total	7,841,000

Repayment costs per acre

Federal investment, per acre	$682.00
From water users	176.00
From power revenues	506.00
Annual water user charges:	
Construction	4.39
Operation and maintenance	2.85
Total	7.24

Increased net income per acre resulting from project irrigation (payment capacity): $9.67.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1941; advanced planning, 1946; construction, 1952.

Date of functional completion of construction: Fiscal year 1958.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1952, $2,500,000.

Construction costs

Original estimated cost	$10,000,000
Allocation of cost: Unallocated	10,000,000
Present estimated cost:	
Construction costs	19,066,000
Transitional development	144,000
Total cost	19,210,000
Allocation of cost:	
Irrigation	7,841,000
Flood Control	11,333,000
Fish and Wildlife	25,000
Recreation	11,000

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation system: Irrigable acreage for service full				11,500
Total				11,500

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ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$18,995,552
Total obligations to June 30, 1954		11,219,742
Allotment, fiscal year 1955	$3,125,000	
Total obligations, fiscal year 1955		3,125,000
Allotment, fiscal year 1956	$1,400,000	
Total obligations, fiscal year 1956		1,400,000
Balance to complete		3,250,810

Work proposed, fiscal year 1956

Kirwin Dam and Reservoir ($505,375).—These funds will cover all remaining costs of Kirwin Dam and Reservoir. The contract time on the prime contract runs through the first half of fiscal year 1956. However, the contractor proposes to complete his work by the end of fiscal year 1955. If he accomplishes this objective and related servicing charges are thereby curtailed, and no unforeseen problems arise, substantial savings will develop in the estimated fiscal year 1956 program.

Kirwin Canal, laterals, and drains ($939,625).—The fiscal year 1956 program provides for acquisition of rights-of-way and earnings on prime contract to be awarded in September 1955 for Kirwin Main Canal and Kirwin laterals, Main Canal; for acquisition of rights-of-way and earnings on prime contract to be awarded in December 1955 for Kirwin Canal and Kirwin laterals, North Canal; and for preparation of plans and specifications and award of prime contract in June 1956 for Kirwin South Canal and Kirwin laterals, South Canal. These funds are required to allow delivery of initial water in April 1957.

General property.—Scheduled for fiscal year 1957 and fiscal year 1958.

Cooperative development.—Programed after 1961.

Chairman HAYDEN. On the Kirwin unit, you had a budget estimate of $1,400,000. You have had that project going for a long time. When are you going to finish it up? The dam, I know, is progressing, but how about the irrigation features?

Mr. GOLZÉ. The dam is substantially completed at this time.

The irrigation features are scheduled to start in fiscal 1956 and be completed in fiscal 1958.

Chairman HAYDEN. Do you have a repayment contract?

Mr. DOMINY. Yes, we have a contract there.

Chairman HAYDEN. For what did you ask the Bureau of the Budget in this instance?

Mr. GOLZÉ. We asked for $2 million. The allowance was $1,400,000.

Chairman HAYDEN. Well, is that the best thing to do or does it simply mean putting off the irrigation development another year?

Mr. GOLZÉ. It means a slower starting of the irrigation facilities. In other words, the award of contracts for their construction will have to be pushed back far enough in the fiscal year to conform to the available funds.

Chairman HAYDEN. You cannot do a whole year's work?

Mr. GOLZÉ. That is right.

LOWER MARIAS UNIT, MONTANA

PROJECT DATA

LOCATION

On the Marias River in north central Montana in the counties of Liberty, Hill, Chouteau, and Toole.

DESCRIPTION

The principal water conservation and control structure of the unit will be Tiber Dam, located on the Marias River 13 miles south and 6 miles west of the town of

Chester, Mont. Provision has been made for future installation of a penstock and a 2,000-kilowatt powerplant, also a 1,600-kilowatt powerplant is being considered under ultimate development at Kenil Drop, on the canal system. Water stored in Tiber Reservoir will be delivered to the 127,000 acres of the unit by means of the 77-mile long Marias Canal, 143 miles of other smaller canals and an extensive lateral system.

STATUS

The total construction cost estimate has been decreased from $67,878,000 to $65,049,000 (anticipated total obligations $65,837,305). This change is due to a reduction in quantities of embankment and reinforcing steel under the prime contract on Tiber Dam, revisions to reflect current cost indices and to transfer of settlers assistance and future year capacity provisions from the estimated construction cost.

On June 30, 1954, the unit was 15 percent complete and Tiber Dam and Reservoir was 43 percent complete. By the end of fiscal year 1955 completion of 26 percent for the unit and 80 percent for Tiber Dam and Reservoir is scheduled. Construction of all major features of the Tiber Dam and Reservoir will be well underway. Project investigations of the irrigation features will be well advanced with revisions completed of the definite plan report for irrigation features. Designs will be underway on the canal outlet tunnel in anticipation of issuance of specifications early in fiscal year 1956, and designs will be underway on other sections of the main canal.

REPAYMENT

The Marias Irrigation District, covering about two-thirds of the unit irrigable area, was established in 1950 and contract negotiations are under way. On September 14, 1953, and April 15, 1954, the Marias Irrigation District approved by resolution drafts of the proposed repayment contract. On August 12, 1954, the contract was approved as to form by the Secretary of the Interior. Construction of specific irrigation works will not be initiated until the repayment contract has been executed.

Amount to be repaid and repayment period

A 40-year repayment contract, with a 10-year development period, is being negotiated with the Marias Irrigation District to provide for repayment of distribution system costs assigned for repayment by irrigation. Additional construction costs will be returned by irrigation through the construction component in water service charges. The commercial power portion of the power allocation will be repaid with interest within 50 years from the date the facility becomes revenue-producing. All project revenues are consolidated to achieve projectwide payout of reimbursable construction costs.

Repayment of costs tentatively allocated to irrigation

Water users	$21,380,000
Surplus revenues, Missouri River Basin project	38,876,000
Total	60,256,000

Repayment costs per acre

Federal investment per acre	$474.00
Water users	168.00
Surplus revenues	306.00
Annual water user charges:	
Construction	[1] 2.25
Operation and maintenance	2.00
Total	4.25

[1] To return in full costs payable by water users. This rate of payment would necessitate an additional water service contract following initial 40-year repayment period to run for 35 years with construction component of $2.25 per acre.

Increased net income per acre resulting from project irrigation (payment capacity) $7.06.

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HISTORY OF PROJECT DEVELOPMENT

Initial data: Planning, 1903; advanced planning, 1946; construction, 1952.

Date of functional completion of construction: Fiscal year 1968.

Fiscal year and amount of initial allotment of appropriations for construction; fiscal year 1953, $2,500,000.

Construction costs

Original estimated cost	$19,700,000
Allocation of cost	(1)
Present estimated cost:	
Total construction cost	65,049,000
Transitional development	1,101,000
Total cost	66,150,000
Tentative allocation of cost:	
Irrigation	60,256,000
Power	2,070,000
Flood control	3,713,000
Recreation	111,000

[1] Unallocated.

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (system): Irrigable acreage for service: Full				127,000
Power (kilowatts)				3,600
Power rates (mills per kilowatt):				
Firm at 50 percent load factor				5.5
Non-firm (average)				3.3

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$66,087,305
Total obligations to June 30, 1954		11,087,305
Allotment, fiscal year 1955	$5,946,000	
Prior year balance available	404,000	
Total obligations, fiscal year 1955		6,350,000
Allotment, fiscal year 1956	$3,675,000	
Total obligations, fiscal year 1956		3,675,000
Balance to complete		44,975,000

Work proposed, fiscal year 1956

Tiber Dam and Reservoir ($3,833,000).— Major construction will be completed under the prime contract awarded in 1952. Funds are also required for relocation of a gas line, continuation of construction of road relocation, clearing lands, access roads, land and land rights, and for payments to material suppliers for contracts already in effect and to be awarded. The feature is scheduled to be complete except for construction drawings and reports.

Lonesome Lake Dam and Reservoir (0).— Further investigations deferred.

Sandy gravity diversion dam and Sandy gravity canal ($3,000).— Investigations will be continued.

Marias Canal, mile 0 to 39.9 ($43,000).— Investigations leading to the completion of a definite plan report will be continued on this and other irrigation facilities.

Marias canal, mile 39.9 to 77.1 ($5,000).—Investigations will be continued.

Kenil feeder canal, Kenil gravity canal and pumping plants and canals ($9,000).— Investigations will be continued.

Laterals (mile 14 to 39.9) ($3,000).—Investigations will be continued.

Laterals (remaining) ($12,000).—Investigations will be continued for the remainder of the lateral system.

Drains (mile 14 to 39.9) ($2,000).—Investigations will be continued.

Drains (remaining) (*$7,000*).—Investigations will be continued for the remainder of the drainage system.

Development farm.—Deferred.

Tiber powerplant and switchyard (*$1,000*).—Investigations will be continued.

Kenil powerplant and switchyard (*$2,000*).—Investigations will be continued.

Pumping plant lines and substation.—All activity on this item deferred until future years, dependent on future requirements for pumping.

General property (permanent camp at Tiber Dam and equipment) (*$12,000*).—Additional equipment required for operation and maintenance of Tiber Dam and Reservoir will be purchased.

General property (permanent Marias camp and equipment) (*$2,000*).—Minor investigations of requirements will be continued.

General property (recreational development—NPS).—All activity on this item deferred until future years.

Chairman HAYDEN. Here is our old friend, the Lower Marias.

The original budget estimate was $6,500,000. Out of that you transferred $2,825,000 to other Missouri Basin units.

You only expect to spend $3,675,000.

Will you explain to the committee just where you propose to transfer these funds from the unit? What work do you propose to defer?

Mr. GOLZÉ. Mr. Chairman, the deferral covers the postponement of the irrigation facilities. There will be some work in fiscal year 1956 involved in planning and continuing the investigations relating to the canal construction, but there will be no construction in fiscal year 1956.

Senator HAYDEN. What is your opinion: that they have to have a few dry years up there before those people will want some irrigation?

Mr. DOMINY. It may be more than just 1 or 2 dry years, Senator Hayden. The price support for wheat has a great influence, too. With assured prices a dry land wheat farmer can take his gamble on an occasional dry year much better than he did before when he had to worry about both price and droughts.

As an agriculturist and having worked in that area a good bit, I am not over enthusiastic about them changing to irrigation merely because they get a year or two of drought.

I think irrigation will come eventually, but I do not know just how soon we can anticipate it.

Chairman HAYDEN. It is a borderline area.

RAPID VALLEY UNIT, SOUTH DAKOTA

PROJECT DATA

LOCATION

The East Central Black Hills in Pennington County, S. Dak. It extends from Pactola Reservoir site on Rapid Creek, 15 miles west of Rapid City, S. Dak., to lands just below Farmingdale.

DESCRIPTION

Consists of a 220-foot high rolled earth-fill dam 1,340 feet long with 2,050 foot earth dike extension, a 99,000 acre-foot reservoir, a diversion dam, and a 25-mile extension of the existing Iowa Canal. Will provide a full supply of water for 2,200 acres of new land, a supplemental supply for approximately 8,900 acres, and a municipal supply of water for Rapid City, S. Dak. and the Rapid City Airbase.

STATUS

The total construction cost estimate of Rapid Valley unit has been decreased from $9,630,000 to $8,852,000 (anticipated total obligations $8,774,901). This

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change is principally due to savings from the low bid price received on construction of United States Highway 85A, decrease in the land and rights account, adjustment of contingencies, reduction in general expenses, and deletion of recreation facilities. Construction of Pactola Dam was started in November 1952.

On June 30, 1954, the unit was approximately 49 percent complete. By the end of fiscal year 1955 completion of 84 percent is scheduled.

REPAYMENT

A water service contract for municipal water supply has been executed with the city of Rapid City. Irrigation contract arrangements will not be undertaken until a decision is made on scheduling construction of specific irrigation works. A 40-year repayment contract with not to exceed a 10-year development period would then be negotiated providing for repayment of distribution system costs assigned for repayment by irrigation. Additional construction costs will be returned through the construction cost component in water service charges. The construction component in water service charges to be paid by Rapid City will return additional construction costs. The Interior Department Appropriation Act for fiscal year 1954 authorized as nonreimbursable, an amount not to exceed $1,000,000 of Pactola Dam costs related to the water supply for the Ellsworth Air Force Base.

Repayment of costs allocated to irrigation

Water users	$155,400
Missouri River Basin project other revenues	3,675,600
Total	3,831,000

Repayment costs per acre

Federal investment per acre	$345.00
From water users	14.00
From power revenue	331.00
Annual water user charges:	
Construction	.35
Operation and maintenance	.55
Total	[1].90
Increased net income per acre resulting from project irrigation (payment capacity)	1.07

[1] To allow for contingencies in payment capacity, determination, annual water charge estimated appropriation 85 percent of increased payment capacity.

HISTORY OF PROJECT DEVELOPMENT

Initial data: Planning, 1937; advanced planning, 1949: construction, 1952.

Date of functional completion of construction:	Fiscal year
Dam	1956
Irrigation facilities	1960

Fiscal year and amount of initial allotment of appropriation for construction: Fiscal year 1953, $1 million.

Construction costs

Original estimated cost (1939)	$2,470,000
Allocation of cost	(1)
Present estimated cost:	
Total construction cost	8,852,000
Transitional development	61,000
Total cost	8,913,000
Allocation of cost:	
Irrigation	3,831,000
Flood control	3,358,000
Municipal	1,724,000

[1] Unallocated.

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (system):				
Full.....acres				2,200
Supplemental.....do				8,900
Total.....do				11,100
Municipal water:				
Rapid City.....acre-feet			9,400	9,400
Ellsworth Air Force Base.....do			1,800	1,800
Total.....do			11,200	11,200

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$8,774,901
Total obligations to June 30, 1954		4,974,968
Allotment, fiscal year 1955	$2,149,700	
Prior year balance available	248,233	
Total obligations, fiscal year 1955		2,397,933
Allotment, fiscal year 1956	$490,000	
Total obligations, fiscal year 1956		490,000
Balance to complete		912,000

Work proposed, fiscal year 1956

Pactola Dam and Reservoir ($736,325).—Construction of Pactola Dam will be completed and storage of water will commence. Relocation of United States Highway 85A and the Forest Service access road will be completed. Funds are also required for purchase of necessary materials and supplies.

Iowa Canal diversion dam and Iowa Canal and extensions ($17,887).—Investigations will be continued and a draft of the definite plan report, part II will be completed.

Iowa extension laterals ($15,013).—Investigations will be conducted to obtain information for the irrigation portion of the definite plan report and preparation of preconstruction data.

Iowa drains ($5,133).—Investigations will be continued to obtain definite plan report information and for preparation of preconstruction data.

General property.—No additional program scheduled until 1960.

The next is the Rapid Valley unit in South Dakota. The budget estimate is $490,000. Under the present rate of construction, when will this unit be completed?

Mr. GOLZÉ. Mr. Chairman, the Pactola dam will be completed in fiscal year 1956. There are some irrigation facilities, but it is not planned to start those before 1958 at the earliest.

Chairman HAYDEN. What type of repayment contract is on that?

Mr. DOMINY. We have on the Rapid Valley a 9 (c) (2), Federal Reclamation Act of 1939, section 9 (c) (2) municipal water contract with the city of Rapid City and under that we will recover the reimbursable cost to the Pactola Reservoir. It has a flood-control allocation and it has also a $1 million allocation that the Congress has made nonreimbursable by reason of our furnishing water to the Rapid City Air Force Base.

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WATER FOR MILITARY

Chairman HAYDEN. You furnish water there for military purposes.

Mr. DOMINY. That is right, sir. The airbase had a critical problem. They were trying to deepen their wells and get an adequate supply but they were getting very hot water with a great quantity of dissolved solids and it was not satisfactory at all. It was going to be a very expensive process to make it usable, so they tied in with the city of Rapid City.

We will deliver the water to Rapid City. Rapid City will put it through a purification plant and then the airbase will build a line down to the city's mains and they will pay the city for the purification and delivery service only and we provide the water through the million dollar nonreimbursable allocation that the Congress approved a couple of years ago.

Senator ELLENDER. Who will pay that million dollars?

Mr. DOMINY. It is not paid since it would have been a cost to the Air Forces and instead of having that money appropriated to the Air Forces for transfer to the reclamation fund, the Congress merely wrote it off and saved that bookkeeping.

Senator ELLENDER. The Treasury will bear the expense.

Mr. DOMINY. The Treasury would bear the expense in any event.

Chairman HAYDEN. The expense was chargeable in any event to national defense. In other words, we had to have water at the airbase. You could get it in 1 or 2 ways, and this was the better way.

Senator MUNDT. It comes out of the same pocket either way.

Mr. DOMINY. That is right. It meant the difference of whether you appropriated the million dollars to the Air Force for transfer to the Bureau of Reclamation.

COST TO AIR FORCE

Senator ELLENDER. Is $1 million the entire cost to the Air Force?

Mr. DOMINY. Yes; it is the entire cost as far as the Pactola supply of water is concerned. They have to build a line to the city to pick it up.

Senator ELLENDER. How much will the city contribute?

Mr. DOMINY. The city will pay the entire cost of the dam allocated to other than flood control.

Senator ELLENDER. What is the entire cost of the dam? Let us get that.

Is that $8,774,901?

Mr. DOMINY. $7,560,000. One million of that was assigned to the Army Air Force.

Senator ELLENDER. How much to flood control?

Mr. DOMINY. $3,358,000 was assigned to flood control.

Senator ELLENDER. Not quite half.

Mr. DOMINY. Not quite half.

Senator ELLENDER. The rest to be paid——

Mr. DOMINY. The balance will be paid from the revenues recovered from the city of Rapid City in the water-service contract that we have with that city.

Senator DWORSHAK. There is no irrigation?

Senator ELLENDER. That is repayable on a yearly basis?

Mr. DOMINY Yes, Senator Ellender.

Senator ELLENDER. What is the rate of interest charged to the city?

Mr. DOMINY. Two percent. We have allowed 2 percent on the cost there.

This is a contract, Senator Dworshak, that is predicated on a growth factor of the city. They pay something like $6,200 the first 5 years and then that steps up at about the rate of 10 percent a year and their growth is running about like we forecast.

Senator DWORSHAK. I wanted to know whether there was any irrigation involved in this project.

Mr. DOMINY. There is some irrigation in prospect below the city of Rapid City. That group met with the Bureau of Reclamation just last week for preliminary discussions of how best to form an irrigation district and how to distribute the water and there would be some water both from Deerfield Reservoir and Pactola Reservoir available for irrigation, but if we never get that irrigation, the city will pay out the full reimbursable cost of Pactola Dam.

Senator MUNDT. There has been some thought expressed that some of the people of Rapid City feel they are paying too much under the contract for their water. Would you care to comment on that?

Mr. DOMINY. Senator Mundt, the first inference that we had that there was such a feeling was when the city manager, Mr. Thorginson, was in our office just a few days ago. He appears to be of the opinion that the city could obtain its additional required water from an expansion of existing subterranean galleries of water that seem to come down there out of the Black Hills and that that could have been done at less cost than the existing contract for Pactola.

He advised us that the city at the moment is going to find it very difficult to borrow the money to build the filtration plant and the required lines to pick up the Pactola water in the river and put it into their city mains.

He asked us if there was any way that we could give him any relief under the existing Government-district contract.

We were only able to advise him that the Secretary of Interior's authority to adjust existing contracts was entirely on the basis that he had to find that it was in the interests of the United States, and unless we could make such a finding, we did not have much hope to offer them.

ORIGIN OF PROJECT

Senator MUNDT. May I inquire as to the origin of this project and contract? Was this something which originated with the people of Rapid City in that area or something which was originated by the Bureau or perhaps by the airbase?

Senator ELLENDER. I was going to ask what was the moving spirit that caused it to come into being?

Senator MUNDT. That is the same thing.

Mr. DOMINY. Well, an additional dam on Rapid Creek was in the Missouri Basin plan when Senate Document 191 was approved by Congress back in 1944. It was at that time predicated as a multiple-purpose feature, flood control, irrigation and municipal water.

The movement to get it built, I believe, stemmed almost entirely from the interests of Rapid City to get their flood control and to firm up a water supply for a rapidly growing city as well as to cooperate

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with the airbase which was being reactivated and which needed this additional water.

I am inclined to think that the city manager, who has been there only about 4 years, may find that these alternative sources of water may not be as dependable as he now thinks.

Certainly they would have to be analyzed in terms of drought periods such as occurred during the 1930's.

He has a firm of engineers employed now from Omaha, Nebr. We suggested that after he gets their report that the city officials might want to sit down and very carefully analyze it and if they do feel they have overcontracted for water, they might be able to work with these farmers down below that want to irrigate and work out some adjustment whereby the city might be relieved of some of their obligation.

Senator ELLENDER. But in the meantime, the city is obligated to carry this proposition?

Mr. DOMINY. That is right, and if we get the money requested in this budget, we will be ready to announce availability of water in about 1957 calendar year, and then the city will either be forced to meet their obligations or find some means of adjusting the contract within the limitations of law.

Senator MUNDT. Is there anything in the Department's record of the project to indicate that the Bureau was exerting pressure on the city of Rapid City to get them to sign that contract?

Mr. DOMINY. I hope not, sir; and I do not believe there is.

We, however, do want to say that we made it clear from the inception that we would not build the dam until we did have a contract; in other words, they could not get the flood control and the additional municipal water they wanted unless they were ready to sign a contract covering the reimbursable costs.

Senator MUNDT. Do you have similar contracts with other cities?

CONTRACT WITH DICKINSON, N. DAK.

Mr. DOMINY. We have a contract with the city of Dickinson in North Dakota of an exactly comparable nature covering the full cost of that dam which also was built for flood control and some irrigation, but at the moment the irrigation is not developed.

We have municipal water contracts with the Cachuma project, the city of Santa Barbara, and related towns in that area.

Senator MUNDT. These contracts are based on the cost of the project, I suppose, rather than a standard water rate; is that correct?

Mr. DOMINY. Under section 9 (c) (2) or the Reclamation Project Act of 1939 we execute a revenue type of contract predicated on forecasts of their needs. We schedule the water, depending on an analysis of the growth factor of the municipality and through the returns of those annual charges, based on the acre-feet delivered, it will pay out the construction cost.

PRICE PER ACRE-FOOT

Senator MUNDT. Do you have a stand price per acre-foot delivered or does that vary from project to project in accordance eith the cost?

Mr. DOMINY. It varies from project to project in accordance with the cost and the alternative means of providing water.

In other words, some cities can well afford to pay 10 cents or 15 cents a thousand gallons if the alternative is much more expensive, whereas another one with a fairly reasonable alternative would not want to pay more than 5 cents a thousand gallons.

Senator MUNDT. What I was getting to is whether the city of Rapid City benefited in part from the fact that a million dollars of the cost was absorbed by the Federal Government for water to the airbase.

Mr. DOMINY. Well, I think they benefit in two ways: It reduced the amount of money that we have to recover on a reimbursable basis and they also get fees from the airbase for purifying the airbase's quantity of water which should help them in building their filtration plant.

PURIFICATION PLANT

Senator MUNDT. As I recall the city engineer expressed to me some surprise about having to build this purification plant. Was there ever any doubt at the time the contract was signed that the water would have to be treated and could not just be used out of the reservoir without any treatment process?

Mr. DOMINY. No; I believe every one appreciated that in diverting water from the river that it would have to be purified. The city, of course, their present water supply is pulled out of the ground and comes fairly pure. All they have to do is add a little chlorine to make it fully satisfactory. But with the river supply, our Pactola Dam is up the river some 15 or 20 miles, and the water would be released there and come down the river to the city's mains, I think every one appreciates that a supply of that sort would need to be put through a purification plant and that would have to be at the city's cost and not a project cost.

Senator MUNDT. Apparently the contract includes some agreement with the airbase for paying a part of the expense, because this has been purified. You say they pay a fee or something?

Mr. DOMINY. The city has a contract with the Air Force by which the Air Force built mains down to the city mains and the city agrees to purify the water and that is on a definite-fee basis.

Senator MUNDT. So that there was a contractual arrangement with the airbase which provided the necessity for a purification plant?

Mr. DOMINY. Yes, sir. It was predicated on a filtration process.

Senator ELLENDER. What is the basis for your 2 percent rate of interest?

Mr. DOMINY. The 2 percent I do not recall exactly how we determined it in the case of Pactola. We normally charge the going rate of interest for long-term credit which the Government pays, which, at the moment, is 2.6.

Senator ELLENDER. That is why I asked the question. Is it the going rate? Is that not the formula rather than an arbitrary sum of 2 percent?

Mr. DOMINY. Well, the process we follow, Senator Ellender, is to determine at the date of the repayment contract what the going rate is and then put that rate in the contract, and if it changes from then on, we do not change the interest rate.

Senator ELLENDER. It remains at 2 percent?

Mr. DOMINY. It remains at the figure established at the time the contract was written.

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SARGENT UNIT, NEBR.

PROJECT DATA

LOCATION

In Blaine and Custer Counties, Nebr., extending from Milburn southeast through the Middle Loup River Valley to Comstock.

DESCRIPTION

Consists of a diversion dam, a 40-mile canal with attendant detention dikes and channels, a small pumping installation, and approximately 44 miles of laterals to service 13,740 acres of land now dry-farmed and situated to the north of the Middle Loup River. Also included, but presently deferred, are features to the south of the river consisting of a 16-mile canal, a 4,400-kilowatt powerplant, and laterals to service about 3,820 acres.

STATUS

The total estimated cost of the Sargent unit has been increased from $16,119,000 to $16,577,000 (anticipated total obligations, $16,131,273). This change is due principally to adjustments of the estimate to reflect more accurate estimating data balanced to a small extent by elimination of certain equipment and decrease in construction contract costs during the past fiscal year. The Sargent Unit Definite Plan Report for the initial development was approved by the Commissioner on May 20, 1953.

A contract for the diversion dam and two sections of the canal was awarded November 3, 1954, and construction started during fiscal year 1955. Design data for the remaining features (initial development) will be submitted to the Chief Engineer during the fiscal year.

REPAYMENT

On September 11, 1954 the irrigation district board of directors executed a water-service and repayment contract and on October 11, 1954, the contract was executed by the Secretary of the Interior. The distribution system repayment obligation of the Sargent Irrigation District is $1,785,400. Payments will be made in 40 years after completion of construction and the close of a 10-year development period. Additional payments will be made through the construction component in water-service changes and a conservancy district tax levy.

Repayment of costs allocated to irrigation

Water users	$3, 160, 000
Conservancy district	204, 000
Missouri River Basin project pooled power revenues	5, 972, 000
Total	9, 336, 000

Repayment costs per acre

Federal investment per acre	$532. 00
From water users	180. 00
From conservancy district	12. 00
From power revenue	340. 00
Annual water user charges:	
Construction	4. 50
Operation and maintenance	2. 60
Total	7. 10

Increased net income per acre resulting from project irrigation (payment capacity): $7.10.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1944 (S. Doc. 191); advanced planning, 1950.
Construction, initial features, 1955.
Date of functional completion of construction: Initial features, fiscal year 1958; deferred features after fiscal year 1963.
Fiscal year and amount of initial allotment of appropriation for construction: Fiscal year 1955, $1 million.

Construction costs

Original estimated cost	(1)
Present construction cost	$16, 577, 000
Settler assistance costs	20, 000
Amount to be allocated	16, 597, 000
Allocation of cost:	
Irrigation	9, 336, 000
Power	7, 001, 000
Flood control	260, 000

(1) Cost not segregated in S. Doc. 191, 1944, $10,046,000 Lower Platte River Basin Report, 1950.

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation: Full acres	0	0	3,000	17,560
Total do	0	0	3,000	17,560
Power development kilowatts	0	0	0	4,400

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$16, 131, 273
Total obligations to June 30, 1954		906, 666
Allotment, fiscal year 1955	$1, 000, 000	
Total obligations, fiscal year 1955		1, 000, 000
Allotment, fiscal year 1956	$3, 300, 000	
Total obligations, fiscal year 1956		3, 300, 000
Balance to complete		10, 924, 607

Work proposed, fiscal year 1956

Milburn diversion works, Sargent Canal, laterals and detention dikes ($3,185,544).—Construction of the Milburn diversion works will continue and be completed near the end of fiscal year 1956. Construction will continue on the Sargent Canal—sections 1 and 2 and associated detention dikes and channels with the work to be largely completed during the fiscal year. An award will be made and work initialed for the final section of the canal and detention dikes. Awards will be made during the fiscal year for both sections of the Sargent laterals with the first section to be partially completed by the end of the fiscal year. This schedule will provide for the irrigation of 3,000 acres of land during 1956 irrigation year.

Woods Park pumping plant and service line ($2,100).—Work will be initiated on the construction of these minor features in coordination with work on the third section of the Sargent Canal which will provide the Woods Park area water supply.

Lillian Canal and laterals.—Construction deferred pending determination of feasibility.

Sargent surface and subsurface drains.—Construction deferred pending determination of exact drainage requirements.

Lillian surface and subsurface drains.—Construction deferred pending determination of feasibility.

Lillian powerplant and switchyard.—Construction deferred pending determination of feasibility.

General service equipment ($59,377).—For purchase of transportation, shop, tools, and work equipment necessary to carry out construction activities and later release of completed facilities to water users.

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Chairman HAYDEN. Tell us about Sargent unit in Nebraska. This is a $16 million project and $1 million spent on it. You are asking for $3,300,000. When do you plan to complete it?

Mr. GOLZÉ. The Sargent unit, sir, will be completed in fiscal year 1958, for the initial features.

Chairman HAYDEN. When are you going to develop the power there?

Mr. DOMINY. The powerplant on the Lillian Canal, which is on the west side of the river, and that part of the Sargent unit is not scheduled for development now.

Chairman HAYDEN. What part of this $16 million do you allocate to power?

ALLOCATION OF COST

Mr. GOLZÉ. Of the allocation of cost, $3,160,000 is allocated to the water users, $204,000 to conservancy districts, and $5,972,000 to the Missouri Basin power revenues, a total of $9,336,000 allocated to irrigation.

Senator ELLENDER. How much to flood control?

Mr. GOLZÉ. The flood-control allocation is only $260,000 and there is $7,001,000 allocated to power.

Chairman HAYDEN. When developed?

Mr. GOLZÉ. When developed.

Chairman HAYDEN. You are not starting that at all yet?

Mr. GOLZÉ. No, sir; not at this time.

Senator ELLENDER. In other words, about half would be repaid with interest and the rest would be chargeable to irrigation?

Mr. GOLZÉ. Slightly more than half would be charged to irrigation.

Senator ELLENDER. That is 40 years without interest or in that neighborhood.

Mr. DOMINY. That is right, sir.

TRANSMISSION DIVISION

PROJECT DATA

LOCATION

The transmission division of the Missouri River Basin project includes the necessary facilities required to market power generated by Missouri River Basin powerplants of the Corps of Engineers and the Bureau of Reclamation. This power market now includes North Dakota, South Dakota, Nebraska, and portions of Montana, Wyoming, Colorado, Minnesota, and Iowa.

DESCRIPTION

The Bureau of Reclamation constructs power transmission facilities to interconnect and deliver power from all Government powerplants in the Missouri River Basin for irrigation pumping, construction power, sales to municipalities, cooperatives, private utilities, and other wholesale customers. Powerplants have been constructed on the Riverton, Shoshone, and Missouri River Basin projects. The Angostura powerplant in South Dakota was placed in operation in December 1951, the Boysen powerplant in Wyoming in August of 1952, the Canyon Ferry powerplant in Montana in December 1953, and the Kortes powerplant in Wyoming in June 1950. These and other plants to be constructed will be interconnected with the Fort Peck, Fort Randall, Garrison, and Gavins Point powerplants, constructed or being constructed by the Corps of Engineers. Fort Peck powerplant has been in operation since 1943. The first unit at Fort Randall was placed in service during February 1954, the second unit in May 1954, and units 3 and 4 in October 1954. Garrison is scheduled for initial service in April 1955.

REPAYMENT

The revenue from the sale of electrical energy will return to the Treasury the entire cost of the transmission division.

STATUS

The total estimated cost has been decreased from $343,912,421 to $313,282,304 (anticipated total obligations, $312,705,895). This decrease is attributable to adjustments to reflect current field data, actual bid prices, changes in design, current cost data, and to changes in future transmission-line requirement as a result of changing power demands.

The principal lines that have been completed and are in service are the Alcova-Boysen-Lovell 115-kilovolt line in Wyoming; the Williston-Garrison 115-kilovolt line, the Garrison-Bismarck-Jamestown 230-kilovolt line and the 115-kilovolt and 69-kilovolt loop in North Dakota; the Rapid City-Midland-Oahe and the 115-kilovolt East River loop in South Dakota and several other minor transmission lines. During fiscal year 1955 the Bureau will continue construction on necessary transmission lines and substations.

REPAYMENT

The revenues from the sale of electrical energy will return to the Treasury the entire cost of the transmission division in accordance with the prescribed provision of law.

HISTORY OF PROJECT DEVELOPMENT

Initial data: Planning, 1938; advance planning, 1947; construction, 1947.

Date of functional completion of construction—indefinite.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1946, $1 million.

Construction costs

Original estimated cost	$68, 000, 000
Allocation of cost: Power	68, 000, 000
Present estimated cost	313, 282, 304
Allocation of cost: Power	313, 282, 304

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956
Power rates; mills per kilowatt-hour firm at 50 percent load factor	5.5	5.5	5.5
Nonfirm (average)	3.3	3.3	3.3

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total oblitations		$312, 705, 895
Total obligations to June 30, 1954		69, 498, 201
Allotment, fiscal year 1955	$12, 325, 000	
Prior year balance available	155, 897	
Total obligations, fiscal year 1955		12, 480, 897
Allotment, fiscal year 1956	$16, 480, 000	
Total obligations, fiscal year 1956		16, 480, 000
Balance to complete		214, 246, 797

Work proposed, fiscal year 1956

East River, South Dakota 115-kilovolt transmission loop and substations ($1,203,000).—Construction will be completed on the 8.3-mile Gavins Point Tap-Gavins Point transmission line which will provide an outlet for power from the Gavins Point powerplant to the East River loop. Construction will be completed for the 115-kilovolt bay addition to the Sioux Falls substation for 115-kilovolt service to the L. & O. Power Cooperative. This 115-kilovolt service will replace the pres-

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ent 69-kilovolt temporary service the cooperative is receiving at Sioux Falls substation. Initial construction will be completed for the 230-kilovolt addition to the Watertown substation to provide an interconnection with the Fort Thompson (Big Bend)-Watertown-Granite Falls 230-kilovolt transmission line. Construction will be completed for the 110/69-kilovolt addition to the Groton substation. Construction will continue for the Yankton substation with major supply and construction contract earning to accrue during fiscal year 1956.

Oahe-Midland-Rapid City 115-kilovolt lines and substations ($190,575).—Construction will be completed for the Pierre substation which will then provide electric service to the cities of Pierre and Fort Pierre and to the Central Electric Association. Invitations will be issued and supply and construction contracts awarded for completion of a 25.2-kilovolt bay addition to the Rapid City substation.

Fort Randall-Winner 115-kilovolt transmission line and substations.—All work on this item will be completed in fiscal year 1955.

Garrison-Oahe-Fort Randall 230-kilovolt transmission lines and substations ($25,000).—Miscellaneous inspection and cleanup work will be completed. Force account work will be required in connection with conversion of the Fort Randall-Oahe transmission line from 115-kilovolt to 230-kilovolt operation and initial energization of the Oahe temporary substation and the Oahe-Mobridge transmission line at 230 kilovolts from the Fort Randall and Garrison powerplants.

Fort Randall-Sioux City 230-kilovolt transmission line and substation ($64,000).—Miscellaneous inspection and cleanup work will be completed. Force account work will be required in connection with energization of these facilities from Fort Randall powerplant.

Big Bend-Watertown-Granite Falls 230-kilovolt transmission lines and substations ($5,255,000).—The program provides for completion of construction and energization of the section of line between Fort Thompson (Big Bend) substation and Watertown substation, including facilities for tapping the Fort Randall-Oahe 230-kilovolt line at the site of the future Fort Thompson (Big Bend) substation, to meet the 1955–56 winter peak load on the East River loop. Substantial contract earning will result from contracts for furnishing steel towers and construcing footings and erecting towers on the section of line from Watertown to Granite Falls substation. Specifications will be issued and contracts awarded for constructing footings and erecting towers for the 3½-mile tie line from Granite Falls substation to the Northern States Power Co. substation. A contract will be awarded for stringing overhead ground wire and conductors from Watertown substation to Northern States Power Co. substation. Construction and miscellaneous equipment contracts for the Granite Falls substation will be awarded and substantial contract earning will mature on these and major supply contracts awarded during fiscal year 1955.

Central North Dakota 230-kilovolt, 115-kilovolt and 69-kilovolt transmission line and substations ($55,692).—Provides for permanently connecting the Bismarck-Jamestown line to the Jamestown substation; completing the Garrison-Voltaire extension into Garrison switchyard; preparing designs, awarding contracts and constructing stage 2 of Devils Lake substation to provide delivery to an REA cooperative; completion of line terminal facilities in Edgeley substation; and dismantling the temporary Garrison-Fort Peck tie.

Jamestown-Fargo 230-kilovolt transmission lines and substations ($3,035,988).—Progress payments will be continued under contracts for Jamestown-Fargo 230-kilovolt line, Fargo substation and Jamestown substation additions, which will be completed within the year.

Edgeley-Groton 115-kilovolt transmission line and substation ($1,239,200).—Progress payments will be continued under contracts for the Edgeley-Groton 115-kilovolt transmission line and the Ellendale substation which will be completed within the year.

Grand Forks-Fargo 115-kilovolt transmission line and substation ($1,040,000).—Construction, materials and equipment contracts will be awarded for this feature and the initial capacity installation at Grand Forks substation. These facilities will deliver power to Minnkota Power Cooperative, municipal systems in the vicinity of Grand Forks, and the Northern States Power Co. Distribution facilities of the cooperative and private utility will further distribute power by wheeling to wholesale customers.

Canyon Ferry-East Helena transmission line and substation.—All work will be completed in fiscal year 1955.

Alcova-Boysen-Lovell-Garland 115-kilovolt and 69-kilovolt transmission lines and substations ($408,568).—Lovell delivery for Mountain States Power Co. and construction of basin substation will be completed. This will complete all work under this program item.

Tap lines, substations, equipment for REA and other customers ($383,989).—Contract payments will be made for equipment and construction of North Cody, Ralston, and Cody substations. Revenue metering equipment will be acquired and installed where wheeling of Missouri River Basin power will be inaugurated to new customers. Two 5,000 kilovolt-ampere shunt reactors will be acquired for installation on the East River 115-kilovolt system. Additional equipment will be acquired for Heart Mountain switchyard and Hamilton Dome substation to provide additional deliveries.

Gering-Sterling 115-kilovolt transmission line and substations.—Bridgeport substation, 3,750 kilovolt-ampere capacity, was constructed during fiscal year 1955. The transmission line and Sidney substation were completed prior to fiscal year 1955.

Sidney-Ogallala 115-kilovolt transmission line and substations ($58,000).—This amount will provide for electrical equipment and construction of additions to Ogallala substation ($50,000) and Julesburg rural substation ($8,000). Completion of these additions will extend into fiscal year 1957. All other features of this circuit are complete and in service.

Gering-Chadron 115-kilovolt transmission line and substations ($6,000).—This amount will provide designs and specifications for additions to Chadron substation with construction scheduled in fiscal year 1957. Additions to Alliance substation will be completed during fiscal year 1955, and the transmission line was completed and in service prior to fiscal year 1954.

Alcova-Gering 115-kilovolt transmission line and related substations ($1,774,155).—This amount will provide continuation of construction of the transmission line, (contract to be awarded March 1955) ($1,475,000), and Lingle tap line, 7 miles of 115-kilovolt construction ($75,000). Also covered by the above amount will be initiation of construction on last 4 bays of Alcova switchyard ($99,155), and Lingle substation, 15,000 kilvolt-ampere ($125,000). These four features scheduled for completion during fiscal year 1957.

Casper-Gering 115-kilovolt transmission line and substations ($175,000).—Construction will continue and progress payments will be paid on installation of a synchronous condenser with related equipment and cooling system at Gering substation ($150,000). Preparation of designs and specifications and initiation of construction by contract on Guernsey substation additions will be accomplished with ($25,000). The permanent Glendo substation will be the only construction remaining in this circuit after fiscal year 1957.

Glendo-Lusk 69-kilovolt transmission line and substations.—All features in this circuit will be complete and in service by the close of fiscal year 1955.

Alcova-Fremont 115-kilovolt transmission line (double circuit) ($50,000).—Initiation of construction of the double circuit line (7.5 miles) in fiscal year 1956 is necessary to furnish power for construction of Fremont Canyon powerplant (Glendo unit) in May 1957.

Imperial metering station.—Complete in fiscal year 1955. No work required.

Fort Randall-O'Neill 115-kilovolt transmission line and substation.—Complete in fiscal year 1955. No funds required.

Fort Randall-Neligh 115-kilovolt transmission line and substation ($940,000).—Field data will be completed early in the fiscal year. Specifications for the prime contracts for both the transmission line and the switching station will be issued and awards made soon after the middle of the fiscal year. Purchase of the switching station equipment will be largely completed during the fiscal year.

Gavins Point-Belden 115-kilovolt transmission line and substation ($30,000).—Funds requested will be needed for final payment for the oil circuit breaker and minor contractual work to complete the switching station during the first quarter of the fiscal year.

Nebraska and northwestern Iowa metering equipment ($61,537).—Purchase and installation of metering equipment for the Northwest Iowa Power Cooperative and the Iowa municipalities will continue and be completed at the end of the fiscal year. Purchase and installation of the necessary metering equipment for Nebraska municipalities will be initiated and completed during the fiscal year.

Other transmission lines and facilities.—No funds required. All work completed or deferred for future years. Includes estimated requirements for years beyond fiscal year 1956 as the need develops.

General property ($478,230).—For completion of permanent warehouse, garage, and storage building at Pierre and Sioux City. Initiation of construction of a warehouse at Grand Forks. Purchase and installation of radio communication, carrier current, and telemetering equipment. This general property is all required for the permanent operation of completed lines and substations.

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Chairman HAYDEN. Now we come to the Transmission Division where you have a budget estimate of $16,480,000.

I understand there are three new facilities proposed.

What are they?

Mr. NIELSEN. Mr. Campbell will respond to that, Mr. Chairman.

Mr. CAMPBELL. The three new starts, sir, are the Grand Forks-Fargo, 115,000-volt transmission line and the Grand Forks substation; the Fort Randall-Neligh 115 kilovolt transmission line and Neligh switching station and the Alcova-Fremont 115 kilovolt transmission line.

Chairman HAYDEN. We have had a lot of complaint from Nebraska that you have 115-kilovolt line from Fort Randall to Neligh, Nebr., and they want that a 230-kilovolt line to Grand Island.

That, as I understand it, takes the power from the dam into Nebraska. Then Nebraska has a public power system that takes it on from there. Is that right.

Mr. CAMPBELL. Yes, sir.

Chairman HAYDEN. What about increasing to 230 kilovolts?

Mr. CAMPBELL. At the present time, Senator, there is some 117,000 kilowatts of Missouri Basin power allocated to the State of Nebraska. We have or will have shortly 2 lines completed both of 115,000 volts which have a capacity of somewhere around 80,000 to 90,000 kilowatts.

With the third line proposed here at 115,000 volts, it is considered that we will have adequate transmission capacity with which to supply within the State of Nebraska the one hundred and seventeen thousand-odd kilowatts of power that has been allocated to the State.

Chairman HAYDEN. Why would it not have been better to build a 230-kilovolt line in the first place?

Mr. CAMPBELL. Well, the Government would have, assuming that we did build a 230-kilovolt transmission line, a surplus capacity over and beyond that capacity that is presently allocated to the State.

Chairman HAYDEN. That is, there has been competition among the several States out there as to how much power they are going to get from the Missouri River dam?

Mr. CAMPBELL. That is correct, sir.

Chairman HAYDEN. And you say that the lines that you plan, which will cost less, will deliver all the power that the State of Nebraska is entitled to receive?

Mr. CAMPBELL. Under the present allocation, that is correct, sir.

Chairman HAYDEN. You say "present allocation." Is that flexible?

Mr. CAMPBELL. There will be some additional power in the future, the distribution of which has not presently been decided upon.

Chairman HAYDEN. Does that depend on future development on the main stem?

Mr. CAMPBELL. It will depend upon the upstream development; yes, sir.

Chairman HAYDEN. The other complaint we have had is that you have not built the transmission lines into Minnesota fast enough.

What about that?

Mr. CAMPBELL. To the best of my knowledge, sir, the transmission lines that will make power available to Minnesota are being constructed as rapidly as funds permit. The related facilities have been deferred temporarily until we have contracts with the various utilities involved in wheeling to the consumers.

Chairman HAYDEN. It has been represented to this committee that there was a thorough understanding as to what the private utilities will get and what the public bodies will get.

Mr. CAMPBELL. That is correct, sir; and while the power which will flow into the Minnesota area has been contracted for; there remained a link between the Government system and these consumers where wheeling was involved.

Within the last week, we understand that those contracts have been approved and are now ready for execution, so that we will be ready with lines over which service can be rendered from the powerplant through the utility system and on to the consumer.

Chairman HAYDEN. You got a satisfactory wheeling contract?

Mr. CAMPBELL. Yes, sir.

Chairman HAYDEN. That is a contract that would transport the power as cheaply, at least, as if the Government built a line itself?

Mr. CAMPBELL. That is right, sir.

WEBSTER UNIT, KANSAS

PROJECT DATA

LOCATION

In north central Kansas along the south fork of the Solomon River in Rooks and Osborne Counties. Webster Dam, the principal feature, is 1 mile east of the town of Webster in Rooks County. Project lands, on both sides of the river, extend from Alton, Kans., to approximately 3 miles east of Osborne, Kans., in Osborne County.

DESCRIPTION

Consists of Webster Dam, a 110-foot high earth-fill storage dam; Webster Reservoir, a 271,700 acre-foot reservoir; the Alton Diversion Dam; Webster north and south side canals, with related laterals and drains. A total of 8,500 acres of land on both sides of the river will be irrigated.

STATUS

The total estimated construction cost of the Webster unit has been decreased from $18,128,000 to $17,929,000. (Anticipated total obligations, $17,842,404.) This slight decrease is due to a composite of a minor increase in estimated cost of Webster Dam and Reservoir, decrease in cost of irrigation facilities, and transfer of transitional development costs from the construction cost estimate.

Construction of Webster Dam was started in November 1952. As of June 30, 1955, this facility will be 70 percent complete and the unit, as a whole, in excess of 50 percent complete. A definite plan supplement will have been submitted and collection of design data initiated on the irrigation facilities.

REPAYMENT

Construction funds appropriate to date have been for the dam only. The definite plan report approved in October 1952, as modified by a revision scheduled in late fiscal year 1955, will form the basic pattern for district organization and the basis for negotiation of a repayment contract. Construction of purely irrigation features is dependent on consummation of the repayment contract.

Status of repayment contract negotiations

Contract negotiations will follow after organization of an irrigation district by the local people.

Amount to be repaid and repayment period

A 40-year repayment contract with not to exceed a 10-year development period will be negotiated to provide for the payments of distribution system costs assigned for payment by irrigation. Additional construction payments will occur in connection with water service charges to be paid by the district.

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Repayment of costs allocated to irrigation

Water users	$1,340,000
Missouri River Basin project pooled power revenues	7,746,000
Total	9,086,000

Repayment costs per acre

Federal investment per acre	$1,070.00
From water users	159.00
From power revenue	911.00
Annual water user charges:	
Construction	3.94
Operation and maintenance	3.76
Total	7.70

Increased net income per acre resulting from project irrigation (payment capacity), $9.63.

HISTORY OF PROJECT DEVELOPMENT

Initial date: Planning, 1941; advance planning, 1952; construction, 1952.

Date of functional completion of construction: Fiscal year 1960.

Fiscal year and amount of initial allotment of appropriations for construction: Fiscal year 1953, $1,500,000.

Construction costs

Original estimated cost	$7,800,000
Allocation of cost	Unallocated
Present construction cost	17,929,000
Settlers assistance and future year capacity provision	140,000
Present estimated cost	18,069,000
Allocation of cost:	
Irrigation	9,086,000
Flood control	8,863,000
Fish and wildlife	20,000
Recreation	100,000

Schedule of development

	Through fiscal year 1954	Fiscal year 1955	Fiscal year 1956	Ultimate
Irrigation (system) full				8,500
Total				8,500

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Estimated total obligations		$17,842,404
Total obligations to June 30, 1954		4,364,500
Allotment, fiscal year 1955	$5,000,000	
Total obligations, fiscal year 1955		5,000,000
Allotment, fiscal year 1956	$3,500,000	
Total obligations, fiscal year 1956		3,500,000
Balance to complete		4,977,904

Work proposed, fiscal year 1956:

Webster Dam and Reservoir ($3,472,840).—Construction will continue and progress payments will be made under a prime contract awarded in November 1952. Completion of the prime contract and essential completion of all supporting work is programed for fiscal year 1956.

Diversion dam, canal, laterals, and drains ($110,000).—Field data will be completed and work started on plans and specifications during fiscal year 1956.

General service equipment.—No program until fiscal year 1957.

Cooperative development ($10,000).—During fiscal year 1956 work will consist of summer fallowing, site preparation, initial planting, and fencing.

Chairman HAYDEN. What about the Webster unit in Kansas? That had a budget estimate of $3½ million.

I would like to know whether construction is progressing on schedule on this project.

Mr. GOLZÉ. Yes, sir, the dam is under construction and scheduled for completion in fiscal year 1956.

Chairman HAYDEN. Will this estimate keep you on schedule?

Mr. GOLZÉ. Yes, sir, there are sufficient funds in the budget estimate for that purpose.

DRAINAGE AND MINOR CONSTRUCTION

Chairman HAYDEN. You have drainage and minor construction. That is $500,000. What are you going to do with that money? I do not mean all the details, but just in general.

Mr. DOMINY. That is an item that takes care of the wind up of construction on a number of projects here. They are all listed in the justification.

Most of it is drainage although as we put these units into operation, we invariably find some adjustments in construction that need to be made. So we lump all that in this one heading for all the projects in the Missouri Basin, all the units.

INVESTIGATIONS

Summarized financial data

Appropriation, fiscal year 1955	$2,049,150	
Prior year balance available	488,544	
Total obligations, fiscal year 1955		$2,537,694
Allotment, fiscal year 1956	$2,915,000	
Total obligations, fiscal year 1956		2,915,000

DESCRIPTION

Advance planning investigations of the Missouri River Basin are made to develop definite plans for individual units of the Missouri River Basin project which are being made ready for construction. These investigations include repayment negotiations and other negotiations with local interests, detailed surveys, and preparation of definite plans and final designs for initial construction features and other preconstruction work which must be undertaken before the unit is ready for the initiation of actual construction.

At the same time basin surveys of the several subbasins or divisions of the Missouri River Basin are being made for continuation of the development of the comprehensive basin plan.

The activities of the Interior Missouri Basin field committee also are financed with Missouri River Basin investigations funds.

STATUS

Advance planning

In fiscal year 1954 advance planning studies were in progress on 20 units, including 6 units for which the advance planning was completed, and 5 of the latter are included in the fiscal year 1955 construction program. The sixth, Yellowtail

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unit, is scheduled for start of construction in fiscal year 1957. In fiscal year 1955 advance planning studies are in progress on only 14 units, including 3 for which the studies are being initiated and 2 scheduled for completion.

Basin surveys

In fiscal year 1954 work was in progress on 17 basin surveys of which 1, namely, the Cannonball division, was completed. The report on this division shows that development of the potential units in the Cannonball River Basin is not feasible under present economic conditions. A draft of a report on the Niobrara River Basin in Nebraska, South Dakota, and Wyoming was completed. At the beginning of fiscal year 1955 the Congress authorized the inclusion of the Ainsworth, Lavaca Flats, Mirage Flats, and O'Neill units, in this basin in Nebraska, in the Missouri River Basin project.

The fiscal year 1955 program has been reduced to 12 active investigations of which 1, namely, the Powder division in Montana and Wyoming is scheduled for completion. The fiscal year 1955 program includes by directive of the Congress initiation of the deferred investigations of the White division in South Dakota and investigations of the potential rehabilitation of the Willow Creek Dam in South Dakota. A special report on Willow Creek will be completed by the end of fiscal year 1955.

Work Proposed, Fiscal Year 1956

Advance planning

The fiscal year 1956 program provides for preconstruction activities on 13 entities. This represents continuation of advance planning work on 11 units and start of advance planning work on 1 division and 1 unit.

DETAILS OF WORK PROPOSED

East Bench unit, Three Forks division, Mont., $90,000.

Description.—This unit is located in the immediate vicinity of Dillon in southwestern Montana. It includes the Clark Canyon Dam and Reservoir on the Beaverhead River, a diversion dam, and a system of canals, laterals and drains. These features will furnish water for approximately 23,200 acres of full irrigation service land and 24,800 acres of supplemental irrigation service land.

Work proposed, fiscal year 1956.—The draft of the definite plan report will be completed about the middle of the fiscal year. Negotiations will be undertaken with the prospective water users to determine a basis for organization of a repayment entity and the terms of a repayment contract. Work will be initiated on development of the necessary contracts. Preliminary negotiations will be opened with the Union Pacific Railroad Co. and the town of Armstead in connection with the surveys of relocations required. A start will be made on collection of preliminary design data.

Garrison diversion unit, North Dakota and South Dakota, $850,000

Description.—This unit is located in the central and eastern portion of North Dakota. It includes 960,000 acres of new irrigation development in the vicinity of the Souris, Sheyenne, and upper James Rivers. Also, as a part of this unit, the possibility exists for development of an additional million acres of irrigation along the western edge of the Red River Valley. Water for irrigation and other purposes will be diverted from Garrison Reservoir into a regulating reservoir located on a drainage divide between the Souris, James, and Sheyenne Rivers. From this reservoir water can be released as needed for use along each of the three streams. A system of canals and pumping plants originating at the regulating reservoir will bring water to the higher lands along the streams. The plan will provide for restoration of Devils and Stump Lakes which, until quite recently, have been receding for many years. It will provide for pollution abatement and municipal-industrial water supply along the three rivers and in the valley of the Red River.

Work proposed, fiscal year 1956.—Details will be worked out for the best general plan of development. Geologic explorations and surveys needed for feasibility-type designs will be finished, and the designs and estimates will be completed. Considerable work will be involved with perfecting the engineering plan, making final cost estimates and reporting on the plan. Drainage plans will be finished. Economic studies of the agricultural situation under conditions of irrigation development will be perfected and reported on. In connection therewith, the reports of other agencies will be secured and incorporated into benefit-cost studies.

In addition work will be underway on the more detailed studies needed for design. These studies will include detailed land classification and topographic surveys on lands selected for earliest development and the collection of design data on principal water supply facilities. There will be some additional work on alternate plans within small areas. Preliminary negotiations with beneficiaries of the development will begin. A development farm will be established in the general area of Sheyenne, N. Dak., to provide data on crops and farming methods best suited to irrigated agriculture in that area.

Hardin unit, Montana, $150,000

Description.—The Hardin unit in Big Horn County to the south and west of Hardin, Mont., will provide for the irrigation of more than 40,000 acres of benchland along the west side of the Bighorn River, and about 4,000 acres on the east side, together with supplemental water for about 1,800 acres now under ditch from Soap Creek. Irrigation water will be supplied from the proposed Yellowtail Reservoir, which will provide storage regulation. The possibility of diverting at a higher elevation to include additional thousands of acres of apparently arable land is also under consideration.

Work proposed, fiscal year 1956.—The detailed land classification will be completed. Engineering studies of alternative methods of water service will be made, and preliminary plans and cost estimates prepared. Analyses of economic data relating to the unit will be started.

Moorhead unit, Montana and Wyoming, $1,000

Description.—The Moorehead Dam site is located on the Powder River in southeastern Montana immediately upstream from Moorhead, Mont. This is a multiple-purpose unit designed to provide irrigation water, 8,000 kilowatts of power and flood and silt control. Irrigation will be accomplisned through development of 26 proposed units extending approximately 180 miles downstream along the Powder River and comprising approximately 58,000 acres of irrigable land.

Work proposed, fiscal year 1956.—The only activity underway on this unit in fiscal year 1956 will be the operation and maintenance of a temporary camp which was constructed in prior years during the investigation stage. This will require $1,000 of funds.

Oahe unit, South Dakota, $475,000

Description.—The Oahe unit is located in eastern South Dakota along the James River between the cities of Mitchell and Aberdeen. The plan is to irrigate approximately 750,000 acres of new land with water diverted from Oahe Reservoir now being constructed by the Corps of Engineers on the Missouri River about 100 miles west of the unit. The diversion works and water-supply system will consist of a pumping plant of 8,000 cubic feet per second capacity lifting the water about 100 feet at Oahe Reservoir, the Pierre Canal about 45 miles long leading to Blunt regulating reservoir, the Ree Canal about 55 miles long terminating in a powerplant of about 180,000-kilowatt capacity where electrical energy will be generated, utilizing more than 200 feet of head before the water enters the distribution works.

Work proposed, fiscal year 1956.—The reconnaissance studies leading to an interim information report will continue and should be nearly complete by the end of the fiscal year in order that the report may be completed in fiscal year 1957. The reconnaissance designs and cost estimates and most of the economic work will be well advanced by the end of the year. Design data will be submitted to the Assistant Commissioner and Chief Engineer for reconnaissance design and estimate of the large structures. Operation of the Huron and Redfield development farms will continue.

Shoshone extensions unit, Wyoming, $25,000

Description.—The Shoshone extensions unit is located in northwestern Wyoming covering portions of Park and Bighorn Counties. The unit will provide a full water supply for the irrigation of 58,340 acres, an off-peak supply for 3,800 acres, and an additional supplemental supply for 43,000 acres. The main water supply will be derived from the existing Buffalo Bill Dam, and the presently constructed Heart Mouutain Canal of the Shoshone project will serve as a carrier for 24,470 acres in the Shoshone extensions unit.

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Ainsworth unit, Nebraska, $180,000

Description.—The Ainsworth unit is located in north central Nebraska, with the storage works on the Snake River. This unit consists of Merritt Dam and Reservoir, the Ainsworth Canal, 3 small pumping plants within the irrigable area, and laterals and drains to provide service for 33,960 acres of irrigable land. An irrigation district has been legally formed.

Work proposed, fiscal year 1956.—The program for fiscal year 1956 provides for completion of the detailed surveys and design data for the Merritt Dam and Reservoir, the access road, and construction facilities. The material will be submitted to the Assistant Commissioner and Chief Engineer for preparation of final designs and specifications. Field studies and surveys necessary for preparation of design data on the Ainsworth Canal will be initiated.

Farwell unit, Nebraska, $80,000

Description.—The Farwell unit is 1 of the 4 units which comprise the Middle Loup division. The unit includes 1 major storage reservoir and several irrigation diversion and distribution features which would permit the irrigation of about 53,000 acres of high-quality land located for the most part along uplands tributary to the Middle Loup Valley. Local interests of the Farwell unit joined with those of the Sargent unit in the formation of the Loup Basin Reclamation District which was recognized officially by the State of Nebraska on January 27, 1950. In a November 2, 1954 election, organization of the Farwell Irrigation District was approved by a majority of almost 4 to 1 as evidence of strong interest in irrigation because of recurring droughts.

Work proposed, fiscal year 1956.—The Farwell unit definite plan report will be completed and work will be initiated on repayment contract negotiations, and continued on cooperative work with the State of Nebraska and other agencies. During the latter part of the fiscal year, surveys and geological explorations and the collection of design data will be started on the initial features of the unit so that the collection of design data may continue and designs and specifications can be prepared in fiscal year 1957, followed by a construction start early in fiscal year 1958.

Kanopolis unit, Kansas, $75,000

The Kanopolis unit is located in north central Kansas on the Smoky Hill River in Ellsworth, McPherson, and Saline Counties. The water supply for the 41,000 acres of this unit will be furnished from storage in Kanopolis Reservoir constructed by the Corps of Engineers. The project lands are situated along both sides of the river valley between the reservoir and Salina, Kans.

Work proposed, fiscal year 1956.—This amount is required for the continuation of detailed land classification and detailed engineering surveys on the unit area.

Lavaca Flats unit, Nebraska, $30,000

Description.—The project would provide irrigation water for 3,200 acres of irrigable land now dry-farmed, by pumping water from the Niobrara River into a gravity canal which would carry the water about 12 miles through the project lands situated generally southeast of Gordon, Nebr., on a table above and extending along the left bank of the river.

Work proposed, fiscal year 1956.—The program for this fiscal year includes assembly of all data, completion of hydrologic studies, engineering design and estimates, economic analyses, and preparation of the definite plan report.

Narrows unit, Colorado, $50,000

Description.—The Narrows unit includes a narrow strip of land along both sides of the South Platte River from a point just below Kersey, Colo., to the Colorado-Nebraska State line. The Narrows Dam will conserve flood flows and return flows which result from upstream developments and will provide supplemental irrigation water for those portions of approximately 230,000 acres of currently irrigated land which experience chronic shortages and 30,000 acres now dry farmed or partially supplied by pump irrigation.

Work proposed, fiscal year 1956.—Funds are required to complete the study of irrigable lands, review hydrologic studies to relate the present water use and requirements for supplemental water to the land classes and payment capacity, make revised estimates of cost and financial studies, and complete the definite plan report.

North Loup division, Nebraska, $165,000

Description.—The North Loup division, located in east-central Nebraska, will provide a full supply of water for about 39,500 acres of high-quality land now being farmed without too much success because of recurring droughts. A supplemental water supply would be furnished to 500 acres and facilities constructed to develop 13,600 kilowatts of hydroelectric power. Studies are also under way as to the possibility of including in the plan some 25,000 additional acres of potentially irrigable land.

Work proposed, fiscal year 1956.—The program for fiscal year 1956 provides for the initiation of work on studies leading to the definite plan report for the three units involved. This will consist of preliminary designs and feasibility estimates, detailed land classification, geologic exploration, and hydrologic, agricultural, and economic studies.

Work proposed, fiscal year 1956.—The fiscal year 1956 request provides for a minimum program on the assembly of design data, refinement of estimates, and preparation of the definite plan report.

Wilson unit, Kansas, $2,000

Description.—The Wilson unit, located on the Saline River in north-central Kansas, will provide for the irrigation of 2,200 acres of presently dry-farmed land in the unit. In addition, storage in Wilson Reservoir will provide flood control and a water supply for an additional 20,800 acres of land downstream from the Wilson unit lands.

Work proposed, fiscal year 1956.—A small amount of funds will be required in fiscal year 1956 for compilation of engineering data.

Basin surveys, $693,700

Work proposed, fiscal year 1956.—The fiscal year 1956 request included funds for work in 12 basins to develop comprehensive basinwide plans for development. Of these basin studies, the one on the Clarks Fork division, Montana, will be completed and a report will be prepared on the Beaverhead Subbasin of the Three Forks division. A small amount of funds are also included for negotiations and studies in connection with uses and apportionment of the water of the St. Mary, Waterton, and Belly Rivers which are under study by the International Joint Commission. Basin surveys will be resumed on the South Dakota Pumping Division and the Yellowstone Division both of which had been deferred for lack of funds.

Missouri River Basin Field Committee, $50,000

The above amount of funds is required to finance the activity of the Missouri River Basin Field Committee which has the responsibility of coordinating the development activities of all the Department of the Interior agencies involved in the conservation and utilization of the resources of the Missouri River Basin.

JUSTIFICATION

A few features of the Missouri River Basin project have been completed and some others are not under construction. There are a large number of authorized units of the project which are not yet under construction, but a large amount of investigation work remains to be done to ready most of these units for inclusion in the construction program. It is necessary to continue simultaneously the program of investigations of the general plan of development and to continue advance planning on additional units to prepare them for construction to insure an orderly basin development and the best use of the water and related resources of the area.

The Missouri River Basin project can provide irrigation for a very large amount of land in the semiarid to subhumid area of the Northern Great Plains, which in the past has been subject to wide variations in rainfall but where irrigation is relatively new and unproven. The problems that must be solved in perfecting the plans for this project are exceptionally difficult and require careful and complete study and analysis.

Completion of investigations for units of the Missouri River Basin project has proceeded slowly because of these difficulties encountered in extending reclamation to the Great Plains and to shortage of funds for the investigation activity.

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There is practically no backlog of planned units in the Missouri River Basin which can be placed under construction at the present time. It is essential that the full amount of the fiscal year 1956 request be allowed and the program continued at about the present level to prepare additional units for start of construction.

Chairman HAYDEN. We next come to our old friend, "Investigations."

Senator DWORSHAK. Mr. Chairman, are you leaving the Missouri Valley now?

Mr. WOODRUFF. This is investigations within the Missouri Basin, Senator Dworshak.

Mr. NIELSEN. Mr. Bennett is prepared to discuss that with you, Mr. Chairman.

Chairman HAYDEN. You had $2,500,000 and then you transferred from the Lower Marias $415,000 so that your revised estimate is $2,915,000.

BREAKDOWN OF TRANSFER FROM MARIAS UNIT

Can you submit a breakdown of this $415,000 transferred from the Lower Marias unit?

What are you going to do with that money?

Mr. BENNETT. Only the $415,000. We would use a part of it—$90,000—for advanced planning for the East Bench unit in Montana.

Another $100,000 for the Garrison diversion, $50,000 for the Hardin unit in Montana, and $100,000 additional on the Oahe unit in South Dakota.

Also an additional $75,000, the remaining part, would be used for basin surveys on the South Dakota pumping division, and the Yellowstone division in Montana-North Dakota.

Chairman HAYDEN. You are satisfied that you have in this estimate all the money needed for investigation purposes in fiscal year 1956?

Mr. BENNETT. I think the $2,915,000, the present total, would be satisfactory for fiscal year 1956.

Senator MUNDT. I would like to ask you a couple of specific questions, Mr. Bennett, on the investigations.

Do you know the status of the Willow Creek?

STATUS OF WILLOW CREEK

Mr. BENNETT. Yes, sir. We have received very recently a report on the Willow Creek development and that is under review in our office at this time.

Senator MUNDT. Do you think that that will be completed so that it will be ready for action next year?

Mr. BENNETT. I think so. We should have it through within the next month.

JAMES RIVER-OAHE IRRIGATION

Senator MUNDT. How about the James River-Oahe irrigation?

Mr. BENNETT. We are progressing as rapidly as we can, Senator. We have $475,000 scheduled for that development for fiscal year 1956.

We recently took steps to try and bring that investigation to a head. It has been dragging for quite some time now.

We want, if we possibly can, to wind it up by the end of fiscal year 1957. By winding it up I mean come out with a planning report.

Senator MUNDT. By "these steps," do you mean the special commission that was set up of irrigation experts that made a review of the whole program?

Mr. BENNETT. I think you are referring to the board of consultants which we had on our drainage problem. This would be beyond that. That matter is fairly well settled now.

We want to work up a program with the district office which will bring this work to a head at the earliest practicable date.

Senator MUNDT. There is quite a little interest out there in making a study of irrigation, which I think they call, on special crops or special projects, as against a whole big irrigation project, and we seem to have a little difficulty getting that one underway.

Could you put some encouragement in the record on that point?

Mr. BENNETT. I am familiar with what you are discussing, Senator.

Senator MUNDT. I have had some correspondence with Mr. Dexheimer about it.

Mr. BENNETT. The thought that has been expressed there, and I believe it came out of some residents of the area, is that possibly those till lands which we found to be not suitable for sustained irrigation might be used for shallow-rooted type of crops with irrigation.

Senator MUNDT. That is correct.

Mr. BENNETT. Frankly, we are quite concerned about that possibility.

Senator MUNDT. By that you mean you are interested or you are dubious?

Mr. BENNETT. We are dubious of its success.

As you know, we spent a considerable sum of money and finally had the Board consultants go over our work. The conclusions were that the land was just not drainable.

We are quite worried that if there is extensive irrigation undertaken in that area that it would have a very adverse effect on the general farming situation.

However, we have not closed our minds to that possibility.

Senator MUNDT. Is there not a way in which an investigation could be made of that or some kind of experiment be undertaken which would resolve that situation so that we would all know?

Mr. BENNETT. Yes, sir; and that is what we would like to see done. We have, as you know, several areas being irrigated there now. They are using the wells which we drilled as a part of the investigation program.

We would like to see, in cooperation with the State College, a rather extensive program of research undertaken on those farms that are now irrigated to see exactly what does happen.

Senator MUNDT. The people at State College are quite willing to participate in that and I think would like to have some kind of contract with the Government to undertake it and are just as interested as anybody in trying to get the final answer, because nobody wants to irrigate if it is going to sour out the soil and prove injurious.

Nor do we want to overlook its possibility if it has some constructive value.

Is there money in this present request which would enable you to make some kind of contract with State College to resolve this particular point?

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Mr. BENNETT. In the $475,000 there has been none of it specifically earmarked for that purpose.

Senator MUNDT. That is what I was afraid of. Is there a possibility that you could earmark enough? It would not take very much. It is not such a large undertaking.

Mr. BENNETT. I think there is probably room within that amount so that we could use some part of it. I do not think it would take very much money for that program.

Senator MUNDT. I do not think so. As you know, that is the area around Huron. People in that community have been out in the vanguard of those advocating irrigation and, naturally, were somewhat disappointed at the results found by your consulting board, but they have no desire to argue with the facts.

They would like to be sure that all the facts are in on these special crops that we have been discussing. So I would be very hopeful that you could find sufficient funds in cooperation with State College so that by another year we would know the exact facts as they relate to these shallow rooted crops.

Mr. BENNETT. I would doubt if you could get any satisfactory results in one year.

AQUIFER ACTIVITY

Senator MUNDT. Are you expanding the aquifer activity or has that been brought to a stop?

Mr. BENNETT. That has been brought to a stop.

Senator MUNDT. Why.

Mr. BENNETT. Well, the aquifer underlaid those lands which we found to be undrainable so that there was little need to carry on that further investigation.

Senator MUNDT. Do you have to have the same kind of drainable features in soil for aquifer irrigation that you need for ditch irrigation?

Mr. BENNETT. Oh, yes, sir. It is your topsoil permeability that affects drainage in this instance.

Senator MUNDT. The aquifer experiments I have seen sort of simulate rainfall. They drag the machine across the top of the ground and the water comes spouting out and follows you on the land as if it is raining.

SPRINKLER IRRIGATION

Mr. BENNETT. I believe you are thinking of what we call sprinkler irrigation.

Senator MUNDT. That is right.

Mr. BENNETT. Certainly, the use of sprinkler irrigation reduces your chances of overwatering. Nevertheless, you have to apply an amount of water which goes into the soil.

Our trouble on the Oahe unit is that the permeability was not too bad in a vertical direction, that is, straight down. But those lands have practically no lateral permeability. You could get the water to go down but you could not get it to move out of the area.

Senator MUNDT. So that a sprinkler type of irrigation would be suitable, would it not, because that water comes down?

Mr. BENNETT. It can only go down so far and then all it can do is back up in the soil. It would take longer with sprinkler irrigation. That is about all.

Senator MUNDT. It would take longer to do what?

Mr. BENNETT. To get waterlogged, because you would be applying it at a little slower rate.

Senator MUNDT. If you cannot do it in a year, does that mean you cannot do it in a year not because you lack the money, but because it takes longer to determine the facts?

Mr. BENNETT. It would take longer to determine the facts. I think you would want to try several different types of shallow-rooted crops in that area, and I think you would want more than the results obtained in 1 year.

Senator MUNDT. May I have your assurance that you will proceed as fast as the limitations of science will permit you to proceed?

Mr. BENNETT. We will be happy to see what we can work out on that.

Senator DWORSHAK. Mr. Chairman, are you through with Missouri Valley now?

DRAINAGE AND MINOR COMPLETION

Chairman HAYDEN. Your estimate for drainage and minor completion is $500,000. The justifications will be included in the record.

(The justifications referred to follow:)

ESTIMATE FOR CONSTRUCTION AND REHABILITATION

Summarized financial data

Allotment, fiscal year 1955	$330,000
Prior year balance available	493,258
Balance available in subsequent years	−22,000
Total obligations, fiscal year 1955	801,258
Allotment, fiscal year 1956	500,000
Prior year balance available	22,000
Total obligations, fiscal year 1956	522,000

DESCRIPTION

The drainage and minor construction program consists of those units on which all major construction has been completed, except facilities which are temporarily deferred, or on which small amounts of funds are programed in the budget year. The programed amounts provide for drainage work, minor repair or replacement work, miscellaneous finishing activities, or preconstruction work on the temporarily deferred facilities.

REPAYMENT

The entire cost of the comprehensive project that is properly allocable to irrigation, commercial power, and municipal water will be repaid in accordance with reclamation law. Costs properly allocable to flood control, navigation, and fish and wildlife are nonreimbursable. Costs allocated to irrigation and in excess of the water users ability to repay, will be repaid from power revenues.

WORK PROPOSED, FISCAL YEAR 1956

The fiscal year 1956 program involves work on eight units and the preparation of completion reports and as-built drawings. Four units will be inactive during fiscal year 1956.

DETAIL OF WORK PROPOSED, FISCAL YEAR IIII, UNITS WITH FISCAL YEAR 1956 PROGRAM

Angostura unit, South Dakota, ($156,500)

Description.—The Angostura unit is located in the southwest corner of South Dakota on the Cheyenne River in Custer and Fall River Counties. A full water

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supply will be provided for 12,154 acres of semiarid lands and the powerplant has a capacity of 1,200 kilowatts. Construction of the main features is complete except for the drainage system and the recreation facilities.

Work proposed, fiscal year 1956.—Puddling, priming, and testing of canal and laterals on Angostura unit will continue during the first half of fiscal year 1956. On January 1, 1956, it is anticipated that the irrigation facilities will be completed to the extent that water service will be assured to virtually all the irrigable lands. Additional bentonite membrane canal lining will be placed in reaches of the canals and laterals where seepage is endangering the irrigable lands. Construction of deep drains will be continued to protect badly seeped areas which have developed more rapidly and extensively than was anticipated when the project was constructed. Cultivation of trees and shrubs in wildlife habitat will continue on a minimum basis.

Boysen unit, Wyoming ($147,500)

Description.—This unit consisting of Boysen Dam and Reservoir, 15,000-kilowatt powerplant and appurtenant features, is located on the Bighorn River, in Fremont County, in central Wyoming about 20 miles upstream from Thermopolis, Wyo. All work is complete except for deferred construction on the relocation of the railroad and repair of the slide area on the access road.

Work proposed, fiscal year 1956.—The contract with the Chicago, Burlington & Quincy Railway Co., which permitted relocation of its tracks, requires that the Bureau perform all maintenance for a period of 5 years after the Boysen Reservoir was filled. The program for fiscal year 1956 provides for the performance of such maintenance on the relocated railroad which may be required as provided for in the relocation contract.

Cedar Bluff unit, Kansas ($40,000)

The Cedar Bluff unit is located in west central Kansas in Trego and Ellis Counties. The unit now provides flood control and will provide for the irrigation of 11,300 acres of land. In addition, exchange flood-control storage in Cedar Bluff Reservoir for irrigation storage in the downstream, existing Kanopolis Reservoir will provide for irrigation of an additional 41,000 acres below Kanopolis Dam in Ellsworth, McPherson and Saline Counties, Kans. Cedar Bluff Dam and Reservoir are in operation and preconstruction work is underway on the irrigation facilities.

Work proposed, fiscal year 1956.—During fiscal year 1956 collection of field design data will be completed, and preparation of plans and specifications initiated on the Cedar Bluff Canal and laterals.

Crow Creek unit, Montana ($22,500)

Description.—The Crow Creek unit is located south of Crow Creek near its confluence with the Missouri River and the town of Toston, in southwestern Montana. This unit was constructed to provide irrigated lands to replace those inundated by the Canyon Ferry Reservoir. All features of the unit are completed to serve 5,020 acres with the exception of drains. Failure of local residents to form a water-users organization continues to delay the placing of the units in the operating status. Efforts to form an organization are continuing. During fiscal year 1955 organization of the owners of nonexcess lands is in prospect.

Work proposed, fiscal year 1956.—The program for fiscal year 1956 provides for priming, puddling, and testing of canals and laterals as well as work on farm unit development. Funds are also provided to cover the operation and maintenance of completed irrigation facilities.

Fort Clark unit, North Dakota ($10,000)

Description.—The Fort Clark unit, located on the right bank of the Missouri River in Mercer County in west-central North Dakota, is one of 15 separate units of the North Dakota pumping division located along the Missouri River from Williston to the North Dakota-South Dakota State line. Water is delivered to the lands of the unit by pumping from the Missouri River with electrically driven pumps. The main plant pumps water to land at 2 elevations; the lower land lies about 30 feet above the river, and the remainder about 75 feet above. Two relift pumping plants, in addition to a system of canals and laterals serve a total of 2,100 acres.

Work proposed, fiscal year 1956.—Technical assistance will continue to be furnished to farmers for adapting operations to irrigation farming. Minor construction items will be completed, and the remaining operation and maintenance equipment will be acquired. The program also provides funds to cover the operation and maintenance of the irrigation facilities.

Jamestown unit, North Dakota ($57,000)

Description.—The Jamestown unit is located on the James River in Foster and Stutsman Counties in east-central North Dakota. Jamestown Dam is about one-fourth mile north of Jamestown and the reservoir extends about 40 miles upstream from that city. It provides much-needed flood control for Jamestown and other cities and farmland in North and South Dakota. It will impound return irrigation flows from areas of the proposed Garrison diversion unit for diversion to irrigable lands along the James River and the Oakes area. The dam was so constructed that future connections can be made to provide municipal water supply for Jamestown.

Work proposed, fiscal year 1956.—Funds are provided for the initial construction of drain wells downstream from the dam.

St. Francis unit, Colorado-Kansas ($50,000)

Description.—The St. Francis unit is located in eastern Colorado in Yuma County, near Hale. Principal features are Bonny Dam, which was completed in 1951, and Bonny Reservoir with a capacity of 170,000 acre-feet. Since 1951 it has been serving in a flood-control capacity and has also been furnishing supplemental water to approximately 750 acres of irrigated lands under an old privately owned canal. Ultimate plans for the unit include a pumping plant, canal, and laterals to serve 6,000 acres of table lands in eastern Colorado.

Work proposed, fiscal year 1956.—These funds will cover design data compilation for fiscal year 1956 for future additions to outlet works, which would be required by the new plan of development set forth in the May 1954 definite plan report, as well as design data compilation for Armel pumping plant, canal, and laterals.

Shadehill unit, South Dakota ($17,000)

Description.—The Shadehill unit is located in northwestern South Dakota in Perkins and Carson Counties, at the confluence of the North and South Forks of the Grand River. This multipurpose unit is planned for flood protection, silt control for the Grand River, and a source of municipal water for the city of Lemmon, S. Dak. The dam and reservoir are complete and the construction of the municipal water facilities is scheduled subsequent to fiscal year 1957.

Work proposed, fiscal year 1956.—Procurement of right-of-way for the reservoir area will be completed. Maintenance of the wildlife sites will be continued through contract with the South Dakota Department of Game, Fish, and Parks. Operation of the Shadehill Development Farm with cooperating agencies will be continued.

Completion reports and as-built drawings ($21,500)

Description.—After a project or a feature of a project is complete and in an operating status, completion reports and as-built drawings are made by the office of the assistant commissioner and chief engineer in Denver for permanent records.

Work proposed, fiscal year 1956.—Funds are included for completion reports and as-built drawings for the Canyon Ferry, Boysen and Kortes Dams and powerplants.

Units inactive in fiscal year 1956

The Canyon Ferry, Dickinson, Keyhole, and Savage units will be inactive during fiscal year 1956. The first three have fiscal year 1955 programs.

Other Departmental Agencies

Chairman Hayden. I want to place in the record the estimates for "Other departmental agencies."

The Bureau of Land Management was $200,000; the Bureau of Indian Affairs, $150,000; the Geological Survey, $1,660,000; the Bureau of Mines, $100,000; the National Park Service, $230,000; and the Fish and Wildlife Service, $210,000, and there is in this bill $2,550,000 to be transferred.

JUSTIFICATIONS

I will put the justifications in the record.

(The justifications referred to follow:)

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BUREAU OF LAND MANAGEMENT

Missouri River Basin Participating Agencies

CONSTRUCTION AND REHABILITATION, MISSOURI RIVER BASIN PROJECT

(ALLOCATED WORKING FUND TO LAND MANAGEMENT)

The estimate of the Bureau of Land Management for fiscal year 1956 amounts to $200,000, distributed as follows:

Land classification	$95,000
Cadastral surveys	105,000
Total	200,000

LAND CLASSIFICATION

There are about 20 million acres of public domain in the Missouri River Basin Approximately 12 million acres have been inventoried and classified. The classification consists of an inventory of vegetative resources and preliminary plans for the development, management, or disposition in order to permit their maximum contribution to the overall program. Lands found unsuitable for public programs will be passed to private ownership.

The work for fiscal year 1956 will be carried on in the Montana pumping-unit of eastern Montana, the lower Yellowstone unit of eastern Montana and western North Dakota, the Tongue River unit of Montana and Wyoming and the North Platte River Basin in Wyoming and Colorado. This schedule has been coordinated with programs of other Interior agencies in the basin project.

CADASTRAL SURVEYS

Cadastral surveys consist of careful measuring of land areas on the ground and recording those measurements, and placing boundary markers. A large part of the area was surveyed at some time in the past, but the monuments have been obliterated with the passage of time. The surveys are required so that the Bureau of Reclamation may secure rights-of-way for canals and reservoirs, lay out farm units, and secure horizontal control for mapping. This work should be done well in advance of the development work of other agencies so that their planning will not be retarded by lack of proper identification of land boundaries.

The program calls for the resurvey and reestablishment of section corners on approximately 260,000 acres on the following projects:

State	Projects	Resurvey acres
North Dakota	Missouri-Souris unit	120,000
South Dakota	Oahe unit	70,000
Nebraska	Lower Platte unit	30,000
Kansas	Wilson	30,000
Do	Webster	10,000
Total acreage		260,000

BUREAU OF INDIAN AFFAIRS

Missouri River Basin Project

GENERAL STATEMENT

The requested amount of $150,000 for 1956 for the Missouri River Basin investigation program will enable the Bureau to carry out the Missouri Basin development program which directly affects large areas of Indian lands and contains elements which will influence the social and political development of the Indian people.

The request is to provide funds for surveys and studies for which the Bureau of Indian Affairs is responsible under the Inter-Agency Missouri Basin development program, including surveys of present and potential irrigation projects; evaluation of the present and prospective status and utilization of human and physical resources of the Indians; appraisal of Indian lands and other resources;

evaluation of damages to Indian interests; and studies of the immediate and long-term effects of the development program on the personal and economic status effecting Indians.

GEOLOGICAL SURVEY

Participation in the Missouri River Basin Project

The objectives of the Geological Survey under the Missouri River Basin project are the collection, analysis, and interpretation of basic data on the water and mineral resources, and the preparation of topographic and geologic maps and reports, that are essential for the most practical development and beneficial use of the water, mineral, and land resources of the basin. Such basic information is needed by the Bureau of Reclamation and all other action agencies of the Government, as well as by the States and private industry, in planning, constructing and operating projects for the development of the basin.

The estimate for fiscal 1956 is $1,660,000, compared to $1,510,041 available in 1955. The increase in funds requested will permit the resumption of the more important water records that were discontinued in 1954 because of reduction in funds, and the initiation of other water investigations related to development projects. The determination of the feasibility of these development projects depends, in large part, upon information on the availability and quality of the water resources of the area concerned.

BUREAU OF MINES

Missouri River Basin Participating Agencies

The estimate for the Bureau of Mines includes $100,000 for acquiring information needed for use in water resource and power planning. The work includes: Studies of the gypsum industry and its potentialities for Montana; studies of raw materials for the chemical industry in Montana; basinwide petroleum and natural-gas engineering surveys; field and laboratory work in connection with the abundant lignite resources of the basin; county-by-county studies of mineral resources and industries in the Missouri portion of the region; and the preparation of certain statistics for mineral production related to the basin economy.

The work on gypsum and raw materials for the chemical industries will include study of the mining, processing, and marketing for the ultimate utilization of the known deposits in Montana, including sources of supply of sodium sulfates from saline lakes, and sources of sulfur and sulfur-bearing natural resources to augment the supply of sulfur for the acid industry. Oil and gas studies will include compiling engineering data on the many oil and gas fields of the petroleum industry in the Missouri Basin, and particularly, the recently discovered fields. Work on the lignite includes studies of carbonization, constitution, and fundamental properties of lignite and lignite storage. The mineral industries survey in Missouri includes investigation of the salt and clay resources in the area and their relation to water, power, and flood-control projects. The statistical studies include such augmentation of Bureau of Mines' statistics as may be necessary to provide special basin data.

The program also presumes that a number of miscellaneous small routine service jobs for the Bureau of Reclamation will also be accomplished.

The work of the Bureau of Mines contemplates assuring that available and potential mineral resources contribute their maximum share in improving the industrial environment resulting from construction of public works and related changes in the region's economy. Development of mineral resources leading to the establishment of integrated mineral industries are as dependent on water as are the development of land, forestry, and fishery resources.

NATIONAL PARK SERVICE

Participation in the Missouri River Basin Project

Included in the 1956 budget under appropriation item "Construction and rehabilitation, Bureau of Reclamation," for allocation to the National Park Service, is the sum of $230,000; $85,000 of which is for recreation plans and surveys, and $145,000 of which is for archeological and historical surveys and excavations.

The amount requested for recreation plans and surveys is the same as that provided for the 1955 fiscal year. It will provide for continuation of the com-

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prehensive basinwide recreation resources survey of the Missouri River Basin (which is proposed for completion during the 1957 fiscal year); investigation and planning of recreation aspects of water-control projects under agreements with the Bureau of Reclamation and the Corps of Engineers; the negotiation and preparation of agreements with Federal, State, county, and local government units covering administration of recreation areas at Bureau of Reclamation reservoirs and to meet obligations of the Service to furnish advisory assistance under reservoir recreation agreements now in effect. The amount requested will provide for study and report on the recreation aspects of 18 specific water-control projects. The program is conducted in connection with Bureau of Reclamation and Corps of Engineers activities to provide those agencies with reports, plans, cost estimates, benefit evaluations, etc., on the recreation aspects of each project.

The historical surveys and archeological salvage program, for which the Service is responsible under the Historic Sites Act of 1935 and the Antiquities Act of 1906, is being carried out in cooperation with the Smithsonian Institution. Many local and State institutions in the Missouri Basin have been actively engaged in the archeological salvage work on a cooperative basis.

The construction of nationwide water-control projects under Federal auspices makes it urgent that the Federal Government salvage representative portions of irreplaceable scientific data. The most urgent reservoir projects and sites which require attention before destruction or inundation, and those for which funds are included in the 1956 budget estimate are as follows:

1. Oahe Reservoir, N. Dak. and S. Dak	$66,000
2. Garrison Reservoir, N. Dak	20,000
3. Fort Randall Reservoir, S. Dak	14,000
4. Tiber Reservoir, Mont	20,000
5. Glendo Reservoir, Wyo	15,000
6. Wilson Reservoir, Kans	5,000
7. Merritt Reservoir, Nebr	5,000
Total	145,000

FISH AND WILDLIFE SERVICE

Missouri River Basin, Participating Agencies

The fish and wildlife resources in the Missouri River Basin, comprising one-sixth of the total land area of the United States, are of tremendous significance to the economy and to the recreation potential of the entire Nation. Plans for comprehensive development of the water resources of the Missouri River Basin, which have been proposed and adopted during the past 15 years will have a fundamental effect on the fish and wildlife resources of the area.

The effect of the proposals in the Missouri River Basin on fish and wildlife habitat will extend far beyond the boundaries of that watershed. Migratory waterfowl in both the central and Pacific flyways depend heavily on the maintenance of production habitat within the Missouri River Basin. For example, the Garrison diversion unit of the Missouri Basin project in North and South Dakota, involving the irrigation of 960,000 acres in the heart of the finest waterfowl producing country in the Nation will have an effect on waterfowl which has attracted the attention and concern of conservationists throughout the United States. One of the reservoirs being considered might well destroy the Lower Souris National Wildlife Refuge, the key waterfowl facility in the northern Great Plains area.

The necessary investigations by the Fish and Wildlife Service of the Garrison diversion unit alone will require $120,000 in fiscal year 1956. Appropriation of the funds, as requested in the budget, will avoid either delaying the completion and submission of the definite plan report by the Bureau of Reclamation (and consequently the start of construction on the unit) or the submission of a report subject to severe public and official criticism by conservation groups because it lacks the needed consideration of fish and wildlife resources.

The funds in the budget estimate are required also to continue work by the Fish and Wildlife Service on project studies of 29 other Bureau of Reclamation units, 5 Corps of Engineers units and several reservoir operational plans of that agency, 6 projects subject to Federal Power Commission license, and a special waterfowl distribution study.

The estimate of $210,000 for fiscal year 1956 is the minimum which will keep the Fish and Wildlife Service activities in the Missouri River Basin in balance with the overall program of land and water development in that basin by Federal and State agencies.

MISSOURI RIVER BASIN TRANSFERS

Chairman HAYDEN. With respect to the funds that are proposed to be transferred to the National Park Service, I would like to call the attention of the committee to the fact that we included in the regular Interior bill a sum of $25,000 for this type of work at the Table Rock Reservoir. However, on the units within the Missouri River Basin project this type of work is financed from funds appropriated for construction. This is the case, isn't it, Mr. Larson?

Mr. LARSON. Senator Hayden, I believe I can answer that.

Under the comprehensive plan of development under the Missouri River Basin the appropriations are made to the Bureau of Reclamation and transferred to the other agencies of the Department of the Interior. In other areas, the appropriation is made directly to the agency doing the work.

That is the difference.

Chairman HAYDEN. We will have to appropriate a little money for Table Rock over and above the amount.

Mr. LARSON. That is correct.

Senator MUNDT. Do you gentlemen have anything to do with the controversy involving the Gavins Point take lines, which is related to the recreational areas to be established around that reservoir or is that all up to the Army engineers?

Mr. GOLZÉ. That is all Corps of Engineers' responsibility.

Chairman HAYDEN. Senator Dworshak, you wanted to ask some questions outside the Missouri.

Senator DWORSHAK. No, in the Missouri.

Chairman HAYDEN. Go right ahead.

Senator DWORSHAK. I want to clarify something.

TOTAL REQUEST FOR MISSOURI BASIN RECLAMATION

What is the total amount for which you are asking for reclamation development in the Missouri River Basin next year?

Mr. GOLZÉ. The appropriation request for the Missouri River Basin for the Bureau of Reclamation is $55,954,000.

Senator DWORSHAK. For continuing work on projects and building transmission lines? That does not include any of the work being done by the Army Corps of Engineers?

Mr. GOLZÉ. No, sir.

Senator DWORSHAK. Do you know how much is being spent by the Army Corps of Engineers, approximately?

Mr. GOLZÉ. Approximately $80 million for fiscal year 1956.

Senator DWORSHAK. And there seems to be a clear working agreement between the Army engineers and the Bureau of Reclamation in the development of the water resources in the Missouri River Basin. As I understand, the Army Engineer Corps constructs the large flood-control multiple-purpose dam on the main river, and the Bureau of Reclamation develops the projects on the tributaries, which are related to the reclamation development, and markets the energy for the entire basin.

Mr. GOLZÉ. That is correct; yes, sir.

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PARTNERSHIP PLAN

Senator DWORSHAK. Is there any partnership involved at any point throughout this entire operation? You know what I refer to. Secretary McKay, a couple of years ago, announced a new partnership plan, and I am wondering if that has been applied in any way to the Missouri River Basin.

Mr. NIELSEN. There is some discussion of the partnership plan in connection with Yellowtail Dam now.

Senator DWORSHAK. Has it been applied to any of these projects which you have discussed today?

Mr. NIELSEN. I do not think it has.

Senator DWORSHAK. Has it been applied to any of the projects being constructed by the Army Engineer Corps?

Mr. NIELSEN. I do not think so.

Senator DWORSHAK. So, in fact, the so-called partnership plan has not been applied in any manner whatsoever to the expansive development of water resources in the Missouri River Basin?

Mr. NIELSEN. Except that it is in the picture now.

Senator DWORSHAK. It is in the picture only so far as Yellowtail.

Mr. NIELSEN. That is the only one I think of.

Senator DWORSHAK. Has work been authorized on that construction?

Mr. NIELSEN. No, it is authorized but there is no money.

Senator DWORSHAK. Nothing is included in the 1956 program for that project?

Mr. GOLZÉ. Not for construction; no, sir.

Senator DWORSHAK. So that so far as you are concerned, the Bureau of Reclamation in the fiscal year 1956 has no partnership plans for any of the projects, either under the Bureau of Reclamation or the Army Engineer Corps in the Missouri River Basin?

Mr. GOLZÉ. These projects, of course, were started some time ago. Most of them have been underway for quite a while.

Senator DWORSHAK. You have been discussing quite extensively some of the ramifications of water contracts for repayment involving municipalities and irrigation districts, but at no point has there been interjected a partnership plan.

Mr. GOLZÉ. Senator, we are always in partnership with the water users in our repayment contracts. It would depend upon what you meant by "partnership."

Senator DWORSHAK. I will be more explicit.

PARTICIPATION OF PRIVATE UTILITIES

You know that the partnership plan involves the participation by private utilities in the building of these dams.

Have there been any contracts negotiated outside of that specific project that you mentioned in Montana whereby the private utilities in the States in the Missouri Basin are proposing to participate in the development of any of the resources and, specifically, power?

Mr. GOLZÉ. No, sir; not as far as we know now. Just the proposed projects coming up.

Senator DWORSHAK. And with the one exception of the project in Montana, you do not know where any proposals have been made for the consideration of this partnership plan?

Mr. NIELSEN. Let me ask Mr. Campbell: Have there been some transmission lines built by the utilities in furtherance of this plan?

Mr. CAMPBELL. No, sir. There has been use of utility systems.

Senator DWORSHAK. That is for wheeling on an exchange basis of power, but no actual investment by private utilities in the building of any of these transmission lines that have been referred to?

Mr. CAMPBELL. Not that I know of.

Senator DWORSHAK. They are being constructed and paid for by the Bureau of Reclamation of the Federal Government?

Mr. CAMPBELL. That is right, sir.

DEER CREEK POWERPLANT, PROVO, UTAH

Chairman HAYDEN. If you have finished, Senator, I have a memorandum here from Senator Bennett with regard to the proposed Deer Creek powerplant near Provo, Utah, which reads:

> It has been proposed that $200,000 be appropriated this year to begin construction of a powerplant on the already existing Deer Creek Dam.
>
> The Provo River Water Users Association which now operates and maintains the Deer Creek Dam is anxious that the funds be appropriated this year. Should the money be made available, they believe it necessary that language be added to the bill or the report providing that the powerplant be turned over to the association for operation and maintenance. There is a legal question whether or not the authorization for the powerplant would allow the transfer for operation and maintenance.

I do know that there is a statute which provides for the transfer of the care, operation, and maintenance of irrigation works, but is there any law that provides for the transfer of the care, operation, and maintenance of powerplants?

Mr. NIELSEN. Peculiarly, this powerplant at Deer Creek is not strictly an irrigation facility. As you noted, there is some doubt as to whether we could transfer operation and maintenance which transfer, incidentally, is very desirable, to the water users. We would like to think about proposed language a little more.

Chairman HAYDEN. It says the Bureau of Reclamation and the Department of Interior have approved the plant and agree that the project should be turned over. "However, they do feel that clarifying language should be added," and then they suggest, the attorney for the water users suggests, the following language which I will include in the record:

> The Secretary of the Interior is directed to transfer to the Provo River Water Users Association the operation and maintenance of the powerplant as a part of the Deer Creek provision of the Provo River project, with the right to dispose of electric energy generated at such plant, upon terms and conditions satisfactory to the Secretary.

Then they say:

> As yet, there has been no departmental testimony on the powerplant on the Senate side.

You will look into that and prepare a statement for the record as to just what the legal situation is and whether, in the opinion of the Bureau at this time, it is advisable to follow that course suggested?

Mr. NIELSEN. I can tell you right now that we very much favor getting that little powerplant built and getting operation and maintenance transferred to the district. We would, however, like to consider further whether language is necessary to accomplish that for certain.

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Chairman HAYDEN. Is that a legislative matter that should go to a legislative committee or is it something we could attend to here by way of a limitation?

Mr. NIELSEN. That is one thing we want to determine and work out carefully and see if it is the sort of matter which might be subject to a point of order.

Chairman HAYDEN. I see.

Mr. NIELSEN. We would like to work that out more thoughtfully.

Chairman HAYDEN. You will do that with a memorandum?

Mr. NIELSEN. Yes. We are anxious to get that powerplant; it is a good one.

(The information requested follows:)

LANGUAGE REGARDING DEER CREEK POWERPLANT ON THE PROVO RIVER PROJECT, UTAH

If language similar to that proposed by the water users is to be included in the bill, it should be amended, in the opinion of the Bureau of Reclamation, to read:

"The Secretary of the Interior is authorized to transfer to the Provo River Water Users' Association the operation and maintenance of the powerplant as a part of the Deer Creek Division of the Provo River project with the right to dispose of the surplus electric energy generated at the plant in accordance with the Federal reclamation laws, upon terms and conditions satisfactory to the Secretary."

DEVELOPMENT FARM PROGRAM

Chairman HAYDEN. Just one more request. Would you supply for the record, a statement setting out the development farm program that is proposed in the budget?

Mr. NIELSEN. We will be glad to do that, Mr. Chairman.

(The statement referred to follows:)

DEVELOPMENT FARMS

Development farms are a vital part of the settlement program on new areas being developed for irrigation. The field operations demonstrate to the inexperienced irrigation farmer the best methods of irrigation and crops best adapted to the area. The results of research conducted by cooperating agricultural agencies and the demonstrations remove many of the factors which often caused hardships or failures on earlier projects. There are 17 development farms in operation at the present time. Six farms have served the desired purposes and have been discontinued, and another will be discontinued at the end of this year. There are four farms proposed for establishment in fiscal year 1956 on the Garrison diversion, Kansas-Bostwick, Ainsworth, and Kirwin units of the Missouri River Basin project. The request for $93,850 for fiscal year 1956 will establish these new farms and operate the 20 farms which will then be in operation. An additional $29,300 is requested for transfer to the cooperating research agencies as part of the cost of the research program. It is estimated that the research agencies will expend about $115,000 of their own funds in fiscal year 1956 for this work.

Development farms proposed for operation, fiscal year 1956

Name of farm	State	Project	Unit or division	Funds requested for fiscal year 1956	
				Establishment and operation	For transfer to other agencies
Burke	Washington	Columbia Basin	Quincy	$3,750	0
Othello	do	do	East	1,550	0
Valley	Arizona	Gila	Wellton-Mohawk	4,500	$250
Mesa	do	do	do	4,500	250
Huron	South Dakota	Missouri River Basin	Oahe	1,500	0
Redfield	do	do	do	5,000	5,000
Mandan	North Dakota	do	Heart Butte	1,500	0
Shadehill	South Dakota	do	Shadehill	3,000	5,000
Deep River	North Dakota	do	Garrison diversion	6,500	0
Sheyenne	do	do	do	[1] 50,000	0
Stenson	Nebraska	do	Nebraska-Bostwick	500	2,000
Shueneman	do	do	do	500	2,000
Hay	do	do	French-Cambridge	500	2,000
Hobson	Kansas	do	Kansas-Bostwick	750	1,700
Kutina	do	do	Cedar Bluff	750	1,700
Kaser	do	do	Webster	500	1,700
Malm	do	do	Kanopolis	3,000	1,700
Stone	Nebraska	do	Sargent	300	2,300
Ainsworth	do	do	Ainsworth	2,500	2,000
Kirwin	Kansas	do	Kirwin	2,750	1,700
Total				93,850	29,300

[1] Includes $45,500 for initial establishment.

NOTE.—Huron, Redfield, Deep River, Sheyenne, Malm, Ainsworth are financed with Missouri Basin project investigation funds.

Chairman HAYDEN. Unless someone has some questions, we thank you, gentlemen.

Mr. NIELSEN. Thank you.

BONNEVILLE POWER ADMINISTRATION

STATEMENT OF W. A. PEARL, ADMINISTRATOR; E. D. OSTRANDER, DIRECTOR OF ADMINISTRATIVE MANAGEMENT; N. H. CALLARD, DIRECTOR OF OPERATION AND MAINTENANCE; E. C. STARR, CHIEF ENGINEER; E. L. WHITE, DEPUTY CHIEF ENGINEER; R. L. CONKLING, DIRECTOR OF BUDGET AND MANAGEMENT; M. D. DUBROW, MANAGER, WASHINGTON, D. C. OFFICE

GENERAL STATEMENT

Mr. PEARL. Good morning, gentlemen.

Chairman HAYDEN. We would be pleased to hear from you, Mr. Pearl, as Administrator of the Bonneville Administration. You may proceed in your own way.

Mr. PEARL. I was going to ask you if I might present for the record, Mr. Chairman, a prepared statement and then just cover it very briefly by the use of some large charts. Does that meet with your approval?

Chairman HAYDEN. Any way that you desire, we will be glad to have you proceed.

Mr. PEARL. We will proceed along that method. It will not take us long to do this if we can use these large charts.

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PREPARED STATEMENT

Chairman HAYDEN. Your entire statement will be included in the record.

(The statement referred to follows:)

STATEMENT OF WILLIAM A. PEARL, ADMINISTRATOR, BONNEVILLE POWER ADMINISTRATION

Mr. Chairman and distinguished Senators, Bonneville Power Administration constructs, operates, maintains and manages the high voltage Federal electric grid system of the Pacific Northwest. This system, which supplies federally generated power at wholesale over a large part of a four-State area, serves publicly and privately owned distributors and large power consuming industries. The Federal grid system is connected with other power systems in the Northwest Power Pool in a highly integrated operation. Because power service to the area depends on the successful operation of the pool, effective and adequate operation and maintenance of the Bonneville Power Administration's system is essential to the Pacific Northwest.

The request for appropriations for fiscal year 1956, adjusted to incorporate the amendment recently presented to the Congress, compares with appropriations granted for fiscal year 1955 as follows:

	1955 adjusted appropriation	1956 request	Increase or (decrease)
Construction	[1] $24,193,875	$15,353,000	($8,840,875)
Operation and maintenance	[2] 6,142,615	6,650,000	507,385
Total	30,336,490	22,003,000	(8,333,490)

[1] Excludes $120,125 transferred to Office of the Solicitor, Department of Interior.
[2] Excludes $57,385 transferred to Office of the Solicitor, Department of Interior.

In addition to the new appropriation of $15,353,000 requested for construction, there will be available an estimated $11,997,000 of funds carried over from the current fiscal year. Accordingly, the total 1956 construction program will be $27,518,000, including $168,000 of reimbursements.

The table below compares our current and fiscal year 1956 programs.

	1955 estimate	1956 request
Construction program:		
New appropriations	[1] $24,193,875	$15,353,000
Carryover available from prior fiscal years	2,860,473	11,997,000
Reimbursements	209,000	168,000
Total, construction program	27,263,348	27,518,000
Operation and maintenance program	[2] 6,142,615	6,650,000
Total, operation and maintenance and construction programs	33,405,963	34,168,000

[1] Excludes $120,125 transferred to Office of Solicitor, Department of the Interior.
[2] Excludes $57,385 transferred to Office of Solicitor, Department of the Interior.

AMENDMENT

The amendment (H. Doc. 156) represents the net result of savings on the one hand, and of accelerations of construction schedules on the other. Because of recent unusual competitive conditions among the suppliers of major electrical equipment and materials and among clearing and construction contractors, of revisions of plans to eliminate features of projects and of the application to new projects of supplies available from completed jobs, we are able to forecast a reduction in previous construction cost estimates for fiscal years 1955 and 1956. But accelerated requirements of our customers, resulting from unforeseen load growth conditions in the Tillamook, Coos Bay, Moses Lake, and The Dalles areas, necessitate a speedup of completion dates for facilities supplying these areas.

These speedups require an increase over previous estimates. As a result of these two opposing factors, we are able to reduce the request for new funds in 1956 by $1,103,000 over that shown in the budget document. This reduction is incorporated in the tables above and is shown in detail on page BP6A of the amendment document.

CONSTRUCTION REQUEST

The construction program request has been prepared in direct and continuing consultation with customers. The proposed main grid facilities are needed to accommodate new Federal generating capacity coming on the line. Construction schedules for these facilities are in accord with the schedules for new dams and powerplants. Proposed customer service or delivery facilities, fed by the main grid, are needed to supply at their load centers the growing requirements of customers. These requirements have been closely examined in each case jointly with the utility or utilities concerned. There is full agreement that the program, both as to content and schedules, is realistic and essential.

Construction funds programed in fiscal year 1956 totaling $27,518,000 will be applied as follows:

	Amount	Percent of total
Construction in progress	$19,283,000	70.1
New construction	7,635,000	27.7
General plant	[1] 500,000	1.8
Reimbursable work for other Federal agencies	100,000	.4
Total	27,518,000	100.0

[1] Includes $68,000 which will be available from the proceeds of sales of personal property, used vehicles, etc.

Construction in progress includes 625 miles of 230-kilovolt and higher-voltage transmission lines, 220 miles of 115-kilovolt lines, 9 new substations having a total capacity of 371,000 kilovolt-amperes and additions to existing substations of 2,400,000 kilovolt-amperes of 230/345-kilovolt transformer capacity and 2,250,000 kilovolt-amperes of lower-voltage transformer capacity.

New construction will add 180 miles of 230-kilovolt and higher-voltage lines, 55 miles of 115-kilovolt lines, 2 new substations having a total capacity of 280,000 kilovolt-amperes, and 600,000 kilovolt-amperes of transformer capacity at existing substations. The more important of the scheduled new projects include $790,000 for a major increase in transformer capacity at the Snohomish substation (item 113), $100,000 for a 345-kilovolt line from Big Eddy to Bethany to transmit the Dalles power to the Portland area (item 126), $2,679,000 for a 230-kilovolt line between Alvey and Reston (item 134) which will provide main grid service to the Coos Bay area, $564,000 for a 230-kilovolt interconnection at La Grande with the system of the Idaho Power Co. to obtain important region-wide benefits by the exchange of seasonal surplus energy between the southern Idaho-Utah and Oregon-Washington areas (item 137), $981,000 for a second transformer at the Columbia substation (item 142), $100,000 for a second 115-kilovolt line from Olympia to Aberdeen to provide reliable service at the Aberdeen substation (item 209), $227,000 for a new substation at Pelican Horn, in the vicinity of Moses Lake (item 223), and $133,000 for a second 115-kilovolt line between Bethany and Forest Grove (item 318).

In fiscal year 1954 gross revenues of the Columbia River power system were $45,317,693. It is currently estimated that gross revenues will rise to approximately $51,500,000 for the current fiscal year and to about $61,500,000 for fiscal year 1956. The upward trend in gross revenues reflects the additional generating capacity coming into service at the dams now under construction. The gross operating revenues of the system have been adequate to meet the expenses of operation, maintenance, marketing, depreciation and interest on the Federal investment and to leave net revenues in excess of such expenses totaling approximately $102,000,000 as of June 30, 1954.

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OPERATIONS AND MAINTENANCE REQUEST

Requirements for proper operation, maintenance, and management of the system for fiscal year 1956 total $6,650,000 as indicated in the following table:

	Fiscal year 1956 estimate	Percent of total
Activity:		
System operation and maintenance	$5,816,000	87.5
Power contracts and rates	229,000	3.4
General administration	605,000	9.1
Total	6,650,000	100.0

We have, as you know, a large and widespread system to manage. This system is the basic high-voltage electrical network of the Pacific Northwest. It transmits power to load centers where it is sold at wholesale to distributing utilities and large industries. The proper functioning of this system is absolutely essential to electric service in the Northwest. The funds requested for operation and maintenance are needed to do this job.

The bulk of the operation and maintenance funds, 87½ percent, will be used for activities directly related to the physical operation and maintenance of the system. These funds are needed to maintain the $345 million worth of plant which will be in service and to operate 172 substations. Standards for operation and maintenance have been carefully compared with manufacturers' recommendations and accepted utility practices, and are conservative. Practically all of the total increase in operation and maintenance of about $500,000 for fiscal year 1956 over fiscal year 1955 is for these direct operating and maintenance activities, due to the increased physical plant.

The remaining 12½ percent of the 1956 operation and maintenance request consists of $229,000 for power contract and rate work and $605,000 for general administration. Expenses in these two categories in fiscal year 1956 will be held to about the same levels as in fiscal year 1955. Contract and rate work includes planning for service to customers, negotiation and preparation of contracts, preparation of power bills, and wholesale rate studies. General administration includes such activities as personnel, procurement, accounting, budget, general management, and administrative services.

I believe the request of $6,650,000 for operation and maintenance funds in 1955 is essential in its entirety to the efficient management of our power system and the protection of the Government's interest in the disposition of Federal power in the Pacific Northwest.

One more point should be noted with respect to our 1956 operation and maintenance request. For the first time, proposed operating, maintenance, and management plans have been reviewed directly with the customers as a means to assist us in formulating our budget. This has been helpful to us. These discussions enable me to assure you that the customers, the operating utilities of the region, agree that the estimates are reasonable and are the minimum which are needed to do a safe and reliable job.

Thank you.

APPROPRIATION REQUESTS

Mr. PEARL. Generally speaking, our budget is a function of new generation that is coming on the line, additional service points for our customers and, of course, a given physical plant that we must operate and maintain.

For the fiscal year 1956 we are asking for $6,650,000 for operation and maintenance, as we have noted here [indicating chart].

For construction we are asking for $15,353,000 which is on the next line.

Just change that a minute and say this: We have a program for the year 1956 which consists of $34,168,000, and that is composed of our construction and our O. and M.

Now, we have what we call a carryover which results from savings for the past years of $11,997,000 so that, in reality, we are only asking for $15,315,000 of new money for the next year.

The point that I am very anxious to make here is that it is the total construction program in which we are interested. We feel that we will need this total amount [indicating $27,518,000] to carry out our program. The carryover becomes a part of the funds we need to do this.

You will notice that our new funds for construction, $15,353,000, our reimbursements, $168,000, and funds available from previous years of $11,997,000, give us a total construction program for 1956 of $27,518,000; that is the item that I am particularly interested in.

ESTIMATED SAVINGS

We have made known to the committee in the House the savings that we expected to have; in other words, the funds that we have indicated here of $11,997,000. When we presented our budget to the House, that figure was only a little over $10 million.

Chairman HAYDEN. Is that a larger amount of money than you have had in a carryover before?

Mr. PEARL. It is below the amount carried over from fiscal year 1954. But it is larger than the amount shown in our original budget presentation of this year.

Chairman HAYDEN. Substantially larger?

Mr. PEARL. Yes, it is substantially larger.

Chairman HAYDEN. Due to the fact that you are unable to expend it within the fiscal year?

Mr. PEARL. No, that is not the case. It is due primarily to savings, to changes in program, to changes in scheduling.

Just to mention briefly savings, the material that we are buying now, we are getting much more reasonably. In other words, just in plain English, there is a price war on. On a transformer bank that last year would have cost us $1 million, today we might get a quotation as low as $600,000.

In our clearing contracts, in our construction contracts, our contractors are bidding lower. We would not be safe in reducing our estimates because this is probably a temporary thing but it has amounted to a material amount in our savings.

This revised budget that we are presenting to you has taken into account two items. One is the savings we have shown since we presented this budget to the House. The other is accelerations. We have had some bids on some items that were much lower than we expected. This is a net saving, so to speak.

Senator DWORSHAK. How much of an increase, Dr. Pearl, is this over your comparable program for the 1955 fiscal year?

Mr. PEARL. Here is our 1955 program, $33,583,473; 1954, $40,199,024; 1953, a little over $59 million. To make a general statement, we will have coming on the line new generation amounting to about one-half million kilowats for the next 5 years.

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INCREASE IN MAINTENANCE AND OPERATION

Senator DWORSHAK. You have about $775,000 more for your total O. and M. and construction program projected for the next year as compared with the current fiscal year?

Mr. PEARL. That is correct. Basically speaking, our budget for construction will remain constant for the next few years because we have almost the same amount of new generation coming on the line for the next 5 years. Of course, our physical plant will increase; therefore, our O. and M. will increase a little. Most of that increase is in the O. and M.

Senator DWORSHAK. Why is that increased?

Mr. PEARL. Because we have additional physical plant to operate and maintain.

Senator DWORSHAK. It has been expanded very gradually; why should there be a material increase in your O. and M?

Mr. PEARL. As you have more facilities, it costs more money to operate and maintain them.

Senator DWORSHAK. How much more are you asking in 1956 for O. and M. than you did in 1955?

Mr. PEARL. $450,000.

Chairman HAYDEN. I am still curious about this saving.

Senator DWORSHAK. How much more for 1956 than 1955?

Mr. PEARL. Eight percent. In 1955, $6,200,000, and for 1956 we are asking for $6,650,000.

ADDITIONAL PERSONNEL

Senator DWORSHAK. How many jobs will that involve? Is it on a personnel basis?

Mr. PEARL. Primarily.

Senator DWORSHAK. Where will these people be located; in the Portland office?

Mr. PEARL. All over the Northwest.

Senator DWORSHAK. You do not know approximately how many new positions you are asking for?

Mr. PEARL. Thirty-five.

Senator DWORSHAK. Thank you.

Mr. PEARL. Let us go back to this chart a moment [indicating chart "Power flow, January 1959"]. This is the amount of power that we will have if the Army and Reclamation stay on their present construction schedules to 1959. The chart shows where we think the markets will be based on a study of potential markets.

So this, in general, shows where the power from the Federal generation is going to go. You see a large block goes up to the northwestern part of Washington, a large part in the area here, Portland, some to the Coos Bay area down at the bottom and a small amount goes to Montana.

However, as you know, the bulk of Hungry Horse power stays in Montana as a result of legislation.

AGREEMENT WITH IDAHO POWER CO.

Senator DWORSHAK. I read recently, Dr. Pearl, of a compact between Bonneville Power Administration and Idaho Power Co. for

an interchange of power as to the construction of transmission lines in the area adjacent to Baker, Oreg. Can you give us a little information on that?

Mr. PEARL. Our line terminates at La Grande. The Idaho Power Co. is building a line from Baker to La Grande to intertie with Bonneville. This is really a power exchange in which we will supply power to Idaho during the time of the year when we have dump power; that is, power that is ordinarily wasted, that goes down the river. During any time that we were short, we could, of course, draw on them for power. It is really an exchange.

Senator DWORSHAK. Have you had no exchange agreement up to this time for power from the Bonneville Power Administration?

Mr. PEARL. We have a tie with the Idaho power through Montana already. This is just another system tie.

Senator DWORSHAK. How much power will be involved, do you know? Will it be mostly dump power?

Mr. PEARL. All dump power. There is no firm power at all involved.

Senator MUNDT. Is the Hungry Horse project part of the Bonneville Power Administration?

Mr. PEARL. For marketing, it is.

Senator DWORSHAK. What is the price for the dump power?

Mr. PEARL. Two and a half mills; sales of dump power carry no ratchet.

Senator DWORSHAK. Delivered where, at La Grande?

Mr. PEARL. At La Grande.

FUNCTION OF BONNEVILLE POWER ADMINISTRATION

Senator MUNDT. Doctor, I am not too familiar with the Bonneville Power Administration. Does it collect in one big pool Government power and private utility power, both, buy it and sell it; is that what happens?

Mr. PEARL. Bonneville Power Administration markets the power from all Federal projects in the Northwest where it has been designated as the marketing agency. There are at present seven Federal projects producing power in the Northwest, and their output is all collected in what we call a grid. We have 5 more under construction so, by 1960, there will be 12 Federal dams producing power.

Now, then, the northwest pool, of course, is a little different. All the generation in the Northwest is hooked together; that is Federal, private, and municipal. All power, in other words, is hooked together in what we call the northwest pool. That is divided into two groups, the western pool which is really Washington and Oregon, and the eastern pool which is really Idaho and Montana.

Senator MUNDT. Is that done by a series of contracts with the private utilities?

Mr. PEARL. Yes. Each utility in this pool, of which Bonneville is one, operates its own facilities completely.

PRIVATE CONTRIBUTION TO POWER POOL

Senator DWORSHAK. What percentage of power is contributed by the Federal dams to this pool and what percentage by private and municipal?

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Mr. PEARL. About half of the west group pool is Federal and the rest is public, private, municipal.

Senator DWORSHAK. Are you taking care of the power requirements in fairly good shape and, if so, do you anticipate any shortage developing in the near future?

Mr. PEARL. We are taking care of the power fairly well; however, as you may know, during the last 2 months the Columbia River flow has been a minimum, lower than any previous record.

Our load has been a maximum, more than we had estimated, with the result that we had to curtail interruptible power to the aluminum companies for a period of weeks.

Senator DWORSHAK. As you know, Doctor, a great deal of furore has resulted adjacent to Albeni Falls because the water level of the reservoir has gone 6 feet down.

PEND OREILLE LAKE WATER LEVEL

Mr. PEARL. We drew Hungry Horse down so low that it became critical. You know that as the head goes down, the power goes down. We were forced to draw water out of Pend Oreille Lake or we would have been curtailing firm power. We drew the lake down 5.28 feet.

Senator DWORSHAK. How many feet of storage water was involved?

Mr. PEARL. I would have to get that for you. I did check to find out how many feet we drew and we drew 5.28.

Senator DWORSHAK. What would you have done if that Albeni Falls storage had not been available?

Mr. PEARL. We would have had to curtail all interruptible and some firm.

Senator DWORSHAK. About the most serious development situation that you have faced in many years?

Mr. PEARL. Yes, and it is a circumstance over which no one has any control. It was due to cold weather; that indicates, of course, that there is a heating load out there because the load had climbed more than we had anticipated and of course the flow of the river establishing a new minimum.

Another record we established is the spring runoff. It is the latest this year that it has ever been. It has always come before the middle of April in previous years, and this year it did not.

SUFFICIENCY OF COLUMBIA BASIN POWER

Senator DWORSHAK. When do you anticipate that you will have a shortage of power in the Columbia River Basin?

Mr. PEARL. Based on the new generation under construction as presently scheduled, the Northwest can take care of its power demands pretty well, I will say, through 1960.

Senator DWORSHAK. Are the large Federal plants coming into production so that they will help to alleviate that situation or have you taken into consideration all the power which will be made available?

Mr. PEARL. We have taken into consideration all the power under construction, and that includes not only Federal construction, but private and municipal construction.

Senator DWORSHAK. I understand that the Washington Water Power Co. recently initiated construction at Noxon Rapids that will increase this by about 400,000 kilowatts.

Mr. PEARL. When completed, 400,000 kilowatts.

Senator DWORSHAK. Are they in the Northwest pool?

Mr. PEARL. They are in the Northwest pool.

Senator MUNDT. When you get this power all collected into a pool, then do you follow the preference formula?

Mr. PEARL. As far as Bonneville is concerned, we follow that; that is the law.

Senator MUNDT. That allocation must be made before you get it in the pool because you have a lot of private power in this pool, too?

Mr. PEARL. Yes, but of course, as I mentioned before, each member of the pool operates its own facilities completely independent of the others. While the overall network works to a decided advantage, giving us in effect around 600,000 additional kilowatts, each member handles his own power. That is to say, we have contracts with preference customers and of course they are taken care of first.

Senator DWORSHAK. Mr. Ostrander, in some areas outside of Bonneville Power Administration jurisdiction, the Bureau of Reclamation markets power generated at Federal plants. However, in the Northwest, is it not true that Bonneville Power markets all of the electricity generated not only at the Army Engineer Corps dams but also the Bureau of Reclamation dams?

Mr. OSTRANDER. That is true, except in southern Idaho. Down in southern Idaho there are a number of projects for which we are not the marketing agency.

Senator DWORSHAK. Outside of that particular place, Bonneville does market all the power from all the Federal installations?

Mr. OSTRANDER. That is correct.

POWER RATES

Senator MUNDT. Is there any difference in price from the standpoint of the consumer, whether he buys from the Bonneville plants or whether he gets it out of the pool in which there is also private power?

Mr. PEARL. Oh, yes; there is a difference. Each utility has its own rates.

Senator MUNDT. So you do not have one uniform rate?

Mr. PEARL. The Northwest utilities do not. Bonneville, of course, is a wholesaler. I would just like to mention that. We only sell at wholesale rates and the utilities, municipalities, and cooperatives sell at retail rates.

Senator DWORSHAK. What happens when the private utilities contribute power to the pool and some of that power is subsequently marketed by Bonneville Power Administration? What rates are charged?

Mr. PEARL. We do not market their power. They market their own power.

If we were to wheel for them, they would pay a wheeling charge, but in reality we do not market any of their power.

Senator DWORSHAK. You say occasionally they contribute some of their surplus power to the Northwest pool. Then who markets that?

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Mr. PEARL. Just a minute, I am trying to get my answer clear.

Senator DWORSHAK. I am not trying to embarrass you, it has just occurred to me that there must be some rate structure involved and I am aware of the fact that you have developed a splendid plan of cooperation under which the power generated in the Northwest in all of the plant has been distributed with great efficiency to meet the power demands.

I am just a little inquisitive as to why you have encountered heretofore no difficulty of any kind in marketing this power, and apparently you must have some overall rates which apply equally to all of the power that comes from the pool.

Mr. PEARL. I believe, to answer your question, I will have to take individual cases that answer it.

CONTRACT RATES

If a utility were short of power and we had power to spare, we, through this pool operation, would take care of their needs.

Senator DWORSHAK. And sell it to them at what?

Mr. PEARL. They pay a rate that is set up by means of a contract.

Senator DWORSHAK. $17.50 per kilowatt year?

Mr. PEARL. That is right, or whatever other established rate schedule might be applicable.

Let us take an example the other way. We did not have sufficient power for aluminum companies during this curtailment. The aluminum companies then were free to buy the power any place they elected. It meant steam generation. They purchased the power, we wheeled it to them, and they paid the people who generated it at whatever rate they asked.

The first batch of steam was available at about 6 mills. So any aluminum company that could not receive from us the power they needed, bought it from a steam-generating plant and paid the rate asked.

Senator MUNDT. Six mills plus the wheeling charge?

Mr. PEARL. Yes. In this pool operation there is not always a wheeling charge.

Senator DWORSHAK. If power is contributed by the private utilities to the Northwest pool, do they market that directly at their own rates or does the Bonneville Power Administration market that power under its own operational plant?

Mr. PEARL. They market it at their rates.

Senator DWORSHAK. They just make it available to relieve the shortage of power which momentarily may exist in areas served by the Northwest power pool?

Mr. PEARL. That is right.

POPULARITY OF POWER POOL

Senator MUNDT. Is this a happy arrangement between the private utilities and the Government or is there a lot of controversy out there?

Mr. PEARL. It is one activity out there that I have never heard criticized and everybody is for this pool operation. It has helped a lot to stabilize power in the Northwest.

Chairman HAYDEN. We have had testimony almost every year to that effect, that it is working out all right.

Mr. PEARL. Yes.

Senator MUNDT. Is there any analogous arrangement anywhere else in the country?

Mr. PEARL. I know of no operation of this magnitude anywhere else.

Senator DWORSHAK. It is phenomenal that you have been able to integrate this plan with so little friction.

Mr. PEARL. Yes. There is one general statement that I would like to make about our budget.

This year we took up our budget plan with the utilities and our other customers before we formulated it and we can say that we have their complete approval and concurrence. That applies to all the budget.

The only request we had from some of our customers was for a speed-up. They thought that we were not getting a facility in quite as soon as we should.

Our operation and maintenance program was checked with the utilities and our equipment maintenance schedules with the vendors of equipment. We feel that we can say that it is a minimum that we are asking for by way of operation and maintenance in order to operate what we will call a well-organized business.

APPROACH OF SELF-SUPPORTING STATUS

Senator MUNDT. Do you have anything in your plans to indicate that there will come a time when this will be a self-supporting entity? You are within $6 million a year, approximately, of being a self-supporting entity, as I understand your charts.

Mr. PEARL. The rest of my budget presentation will answer, I think, your questions 100 percent. I can show you just where we stand financially.

Senator MUNDT. As I understand your earlier chart, you want $6 million from the Government for operation and maintenance?

Mr. PEARL. But we return all of that to the Government.

Senator MUNDT. That all comes back?

Mr. PEARL. We return all the capital invested in the Bonneville transmission system and in the generating plants allocated to power. We amortize it and pay interest on it.

Senator MUNDT. What I was interested in is this operation and maintenance factor which looks to me like a $6 million-a-year charge to the Government?

Mr. PEARL. That is all returned to the Government.

Senator MUNDT. That is returned?

Mr. PEARL. Yes.

Senator MUNDT. This is just an advance of money?

Mr. PEARL. That is correct. I have charts here to show you just where we stand financially.

The question that you raised just a minute ago about our increase in O. and M. I think is very well illustrated here [indicating chart "Operating statistics"]. I would like to refer back to, say, 1953, when we received $6,331,442 for operation and maintenance. Since that time our plant has increased about 25 percent, yet we are asking for almost identically the same amount this year.

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By that I mean this: we had 132 substations in fiscal year 1953 and we will have 172 to maintain in fiscal year 1956. Transformer capacity in 1953 was 4,517,000 kilovolt-amperes. For 1956, we estimate 7,350,000 kilovolt-amperes; with respect to transmission lines, at that time we had 4,658 miles of line and as of 1956 we will have 6,288 miles; points of delivery have increased; also sales of energy and revenues.

During the year 1953 our revenues were $38,949,448. We estimate for 1956, $61,473,000. Actually, each year, you see, revenues increased very materially, being $45,216,652 in 1954 and $52,832,000 in 1955.

These data indicate an increase in the physical plant and we are asking for a slight increase in O. and M.

Senator DWORSHAK. Mr. Chairman, I would suggest that this table be inserted in the record.

Chairman HAYDEN. That will be done.

(The table referred to follows:)

Operating statistics

	1953	1954	1955	1956	Percent increase 1955 to 1956
Operations and maintenance requirements	$6,331,442	$5,882,488	$6,142,615	$6,650,000	8.26
Substations [1]	132	145	158	172	8.86
Transformer capacity (kilovolt-ampere): [1]					
230 and lower, kilovolts	4,517,000	5,709,000	6,153,000	6,950,000	13.20
230/287, do				400,000	
Transmission lines [1], structure miles	4,658	5,410	6,035	6,288	4.19
Electric plant in service [2]	$220,547,000	$267,497,000	$304,269,000	$344,565,000	13.24
Points of delivery [3]	295	307	324	333	2.78
Energy sales, millions kilowatt-hours	16,393	18,764	22,575	26,623	17.93
Revenues	$38,949,448	$45,216,652	$52,832,000	$61,473,000	16.36
Generating plants in operation [4]	3	5	7	11	57.14
Generating capacity in service [4], kilowatts	3,014,000	3,440,000	3,749,000	4,626,000	23.39

[1] Beginning of year.
[2] Average over year.
[3] End of year.
[4] Jan. 1 of each year.

RATIO OF MAINTENANCE COST TO PLANT

Mr. PEARL. We will proceed if there are no questions.

Operation and maintenance per dollar of average plant in service is indicated on this chart [indicating chart "O. and M. Obligations Compared with Plant in Service—fiscal year 1949 through fiscal year 1956"]. This ratio is going down materially.

During 1956 we estimate that we will spend 1.93 cents per dollar of average plant in service, which is decidedly the lowest in our history. In other words, this chart says that while our operation and maintenance increases, it is not increasing in proportion to the physical size of the plant.

Senator DWORSHAK. As your volume increases, it is possible to have greater efficiency and the lower cost operation?

Mr. PEARL. That is correct.

This [indicating chart condensed summary of revenues and expenses] shows our operating revenues, our expenses, provision for depreciation, interest, and miscellaneous. Not to spend too much time on this chart, but to show you the results of the operation of Bonne-

ville from its origin to June 30, 1954, our operating revenues have been $349,746,787.

Now, then, these are the sums that we have allocated of the total returned to the Federal Treasury: For operation and maintenance, $95,625,269; for depreciation, $65,836,749; for interest, $84,883,400; for miscellaneous income deductions, $1,617,406; giving us a total of $247,962,824.

When you subtract that from our revenue, you find that we are in the black to the extent of $101,783,963. I think that answers two earlier questions of the committee.

REIMBURSEMENT TO GOVERNMENT

Senator DWORSHAK. Doctor, that amount is being reimbursed to the Government?

Mr. PEARL. This amount is being reimbursed to the Government.

Senator DWORSHAK. How about the $101 million; that is not net profit? Is that not for the purpose of helping repay the other costs of construction of dams and transmission lines?

Mr. PEARL. That is in here; that is all taken in here.

Senator DWORSHAK. Before you have that?

Mr. PEARL. That is right.

Now, the method of using that $100 million is something that I will mention briefly. If you want any detail, Mr. Ostrander can give you the detail.

We like to think of this as funds that we are paying in advance of requirement, wherein, as more expensive generating plants come on the line, it will move the date when we will need to increase our rates further into the future.

This is a figure about which there has been a lot of discussion. How are we going to use it? If there is any detail that you want, Mr. Ostrander can give it to you.

PROFIT FROM DUMP POWER

Chairman HAYDEN. There is one question I wanted to ask and that is this: How much of this profit you put into the Treasury comes from the fact you have a market for your dump power?

Mr. PEARL. You are right, there is an appreciable percentage of it that comes from the fact that we are selling interruptible power and dump power. I do not know whether Mr. Ostrander can answer this without hunting it up.

Can you tell the chairman, had we not sold any dump or interruptible, where that figure would have stood?

Mr. OSTRANDER. We have not a precise analysis of that, Senator, for the complete history. We know the sale of dump power has been a substantial item.

According to a rather rough analysis that I made for the fiscal year 1954, about 98 percent; in other words, practically all of this net last year, could be attributed to non-firm energy sales, part to aluminum and part to other customers.

Of course, in prior years it has not been that large a percentage.

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Chairman HAYDEN. In other words, if it were not for the aluminum companies coming in there, and buying this dump power, you would have been compelled to raise your rates to the other customers?

Mr. OSTRANDER. Sooner perhaps than otherwise; that is right.

Chairman HAYDEN. As a result you have been able to delay a general increase in your rates?

Mr. OSTRANDER. That is right. Our rates have not been changed as to basic level since they were adopted back in 1938.

Chairman HAYDEN. The general impression is that some day they will have to be?

Mr. OSTRANDER. That some day is not very far away because you see we have a number of new dams coming in that are being built at today's construction cost, which is more than twice what costs were when Grand Coulee and Bonneville were constructed.

REEXAMINATION OF POWER RATE

Senator DWORSHAK. Have you not set a specific date for increasing your $17.50 rate?

Mr. OSTRANDER. We have a specific date for reexamining it.

Senator DWORSHAK. When?

Mr. OSTRANDER. December 20, 1956.

Senator DWORSHAK. It is unfortunate that occasionally when you reduce the availability of dump or interruptible power, necessitating the shutdown of some of the operations in the aluminum plants, that there immediately arises criticism based on the contention that these plants are entitled to full-time power.

It is true that you have contracts for the sale of that interruptible or dump power?

Dr. PEARL. That is right.

Senator DWORSHAK. And it is not a situation that deserves the criticism that it receives?

Dr. PEARL. No; they entered into the agreements, which provide for so much firm power and so much interruptible.

I should add, of course, for their benefit, that they are very anxious to firm up that interruptible.

Senator DWORSHAK. But it is not the fault of the Government or the Bonneville Power Administration that the acknowledged terms of the contracts with the aluminum companies provide for cutting down the interruptible power when it is necessary because of stream flow?

Dr. PEARL. They know that if we are short of firm power their interruptible will be curtailed.

Chairman HAYDEN. The committee will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 12 noon, Monday, June 6, 1955, the committee recessed, to reconvene at 10 a. m., Tuesday, June 7, 1955.)

PUBLIC WORKS APPROPRIATIONS, 1956

TUESDAY, JUNE 7, 1955

UNITED STATES SENATE,
BUREAU OF RECLAMATION AND
INTERIOR POWER MARKETING AGENCIES
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10 a.m., pursuant to recess in room F–37, the Capitol, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden, Senators Magnuson and Dworshak.

DEPARTMENT OF THE INTERIOR

BONNEVILLE POWER ADMINISTRATION

STATEMENTS OF W. A. PEARL, ADMINISTRATOR; E. D. OSTRANDER, DIRECTOR OF ADMINISTRATIVE MANAGEMENT; N. H. CALLARD, DIRECTOR OF OPERATIONS AND MAINTENANCE; E. C. STARR, CHIEF ENGINEER; E. L. WHITE, DEPUTY CHIEF ENGINEER; R. L. CONKLING, DIRECTOR OF BUDGET AND MANAGEMENT; M. D. DUBROW, MANAGER, WASHINGTON, D. C., OFFICE

CARRYOVER FUNDS

Chairman HAYDEN. The committee will be in order.

Dr. Pearl, you may proceed.

Mr. PEARL. Mr. Chairman, I would like to clear up one question. Apparently I may have used the word "savings" to apply to what we really mean to call carryover. I would like to clear that up.

In our request for construction we are asking for $15,353,000. That is appropriations. Our reimbursements are $168,000 and what we call funds available from prior fiscal years, $11,997,000. That is what we sometimes refer to as carryover. It is composed partially of savings. Our savings, which are the result of low bids and changes in plans where we can effect a saving, amounted to $6,938,000.

Now, also included in carryover are deferrals or delays. These amounted to $5,121,000. Also, there are deletions. These amounted to $207,000. Then we applied certain downward adjustments, reflecting use of inventory, say, and we come out with a figure of $11,997,000.

Chairman HAYDEN. That is a very clear explanation.

There is always confusion in the Appropriations Committees about how much you had, how much you spent, and how much you carried over, and particularly in construction work you cannot figure out

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exactly to the 30th day of June and you made a contract—you pay the contractor according to how fast he proceeds.

You are paying a good contractor more promptly than one that is not so good.

I think it is well that you made that explanation so that there will be no misunderstanding about it.

CONSTRUCTION PROGRAM

Mr. PEARL. There is one more statement which I would like to add to that. This gives us a program of $27,518,000 for construction. Those are the funds that we will need to meet the new generation and to provide our customer facilities during the next year.

Did you have a question?

Chairman HAYDEN. But some of the money that the Congress is going to appropriate in the bill that is passed this year will not be spent during the next fiscal year. You will carry some of that over?

Mr. PEARL. We are of the opinion that we will not. We think that we need this to meet the energization dates.

Chairman HAYDEN. I will be willing to bet that there will be some carryover.

Mr. PEARL. It will be a minimum.

The other item that I would like to mention is this: Of this program, that is a little over $27 million, work in progress will require $19,283,000.

Now, we are asking for funds for new starts in the amount of $7,635,000. We are asking for our plant facilities, $500,000, and for reimbursable $100,000, and when you add those up, you arrive at this program figure of $27 million.

Chairman HAYDEN. I thank you for the explanation.

Mr. PEARL. Would you like me to continue, or would you like to have questions?

Chairman HAYDEN. Would that give you all the facilities that you need? Are you satisfied that you are asking for enough money?

Mr. PEARL. To meet this program, we feel that we will.

Chairman HAYDEN. Is that all the money you asked of the Budget?

Mr. PEARL. By way of new funds we are only asking for $15 million but we are also asking for this carryover.

Chairman HAYDEN. I understand, but did you ask the Bureau of the Budget for more money that the budget presented to Congress?

Mr. PEARL. As I recall, it was a little more. However, we feel that this will do the job adequately.

BUDGET ALLOWANCE

Chairman HAYDEN. You might just put the exact figure in that you asked for.

Mr. PEARL. I do not know what it is.

Mr. CONKLING. We will have to supply that for the record, Mr. Chairman.

(The information referred to follows:)

Appropriation estimates and allowances submitted to the Bureau of the Budget

	Submission	Allowance
Construction	$18,608,000	$16,456,000
Amendment to the budget (H. Doc. 156)	−1,103,000	−1,103,000
Net: Construction	17,505,000	15,353,000
Operation and maintenance	6,800,000	6,650,000
Total appropriation estimate	24,305,000	22,003,000

REDUCTIONS IN COSTS

Chairman HAYDEN. You may proceed with your statement.

Mr. PEARL. Your committee will be advised of any additional savings, and now I am using the term "savings," to mean actual reductions in costs, between now and the end of the year.

Chairman HAYDEN. That is to say that if you get exceptionally good bids on a contract, you are going to save some money?

Mr. PEARL. That is correct.

Chairman HAYDEN. Has the bidding been keen?

Mr. PEARL. It has been during the last year.

Chairman HAYDEN. The contractors are getting hungry, are they?

INCREASE IN OPERATION AND MAINTENANCE

Mr. PEARL. That is probably the answer; yes. They have been bidding low. Equipment, of course, has been the larger part of our savings. They are bidding low on equipment.

To just go to our operation and maintenance for a minute, for our operation and maintenance as I indicated yesterday we are asking for $6,650,000. This is an increase of $507,385 over the present year. The increase in appropriations is $450,000, but taking into account a transfer of fiscal year 1955 funds of $57,385 to the solicitor of the department, the increase is $507,385. This, of course, is based upon studies which we have made of the operations of utilities' standard practices.

Most of our present maintenance is preventive maintenance, rather than waiting until the line falls down.

That figure breaks up as follows:

Of that sum, $5,816,000 will be used to actually operate and maintain the physical plant——

Chairman HAYDEN. That would go largely for salaries?

Mr. PEARL. Yes, a large percent is salaries.

$229,000 is for our rates and our contracts and that type of activity and $605,000 is for general administration. That includes personnel, procurement, budget, accounting, administrative services, and that type of item.

The study we have made in order to arrive at this was a result of checking on recommended manufacturers' procedures for operation and maintenance of our equipment, on standard utility practice and, in addition, we checked with our customers to see what they thought of our program: Are we giving them adequate service?

As a result of this we came up with what we think is, I might say, a minimum on which we can maintain and operate and still do a good job.

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REVENUE

The other item that we did not complete yesterday, that will just take a minute, is that I thought you might be interested in where our revenue comes from and where it goes.

In our revenue at Bonneville, of each dollar of revenue 35.18 cents comes from the aluminum industry; 11.96 comes from other industries; 17.39 cents comes from privately owned utilities; 32.84 cents comes from public utilities.

In other words, our revenue of $45,317,693 for fiscal year 1954 is divided into those sources.

Chairman HAYDEN. Now, this aluminum industry revenue depends upon the flow of the river. That is, if you have a dry season and you cannot deliver, that is the place where the first pinch comes?

Mr. PEARL. That is where the first pinch comes.

We first interrupt what we call our interruptible power. I should say we curtail our interruptible power. If we had a dry year, a low flow, that is the first revenue that would suffer.

Chairman HAYDEN. What has been the largest revenue obtained from that source in any year?

Mr. PEARL. As of 1954, this is a record. That is our record.

Chairman HAYDEN. You did not have an extra quantity of water?

Mr. PEARL. Yes, we did. We had a good year.

Chairman HAYDEN. When was the last short year?

Mr. PEARL. 1952.

Mr. OSTRANDER. In fiscal year 1953, we encountered a rather poor water condition beginning in the late fall and during the early winter.

Mr. PEARL. Now, then, for just a moment on what happens to the dollar that we take in: 28.23 percent of our revenue goes for operation and maintenance of the power plants and the Bonneville Administration; 27.03 percent goes to pay interest on the debt; 25.68 percent goes for depreciation.

Chairman HAYDEN. What do you do with that depreciation money?

Mr. PEARL. It goes into the Federal Treasury.

Chairman HAYDEN. It is supposed to be available there for future appropriations by Congress in the event that it is needed?

Mr. PEARL. I would like to have Mr. Ostrander answer that.

Mr. OSTRANDER. Senator Hayden, that does go back to the Treasury and is in repayment of the capital investment.

The money is in the funds of the Treasury, and, of course, the Congress can appropriate that if they wish.

It is not held as a reserve for future plant.

Chairman HAYDEN. In many businesses, they hold it as a reserve for future needs.

Mr. OSTRANDER. In a business, they would reinvest it year by year in their own plant.

Of course, in our operation we have to return all revenues to the Treasury and come back and get new appropriations for the plant.

Chairman HAYDEN. This means that of the moneys appropriated by Congress, you paid back the revenue?

Mr. OSTRANDER. We paid that back on the capital plus, of course, the net revenues which also pay on the capital.

Mr. PEARL. The one item which I had not added was the 19.06 percent which we call net revenue. That is above the requirements in the other categories.

Mr. OSTRANDER. Senator Hayden, all of our revenue, the entire 100 percent, goes back to the Treasury. We consider, of course, that first we apply that to paying the operation and maintenance, and then to paying the interest on the investment, and all the remainder is repayment of the capital investment that has been previously appropriated by the Congress.

Chairman HAYDEN. Maybe "amortization" would be a better term than "depreciation."

Mr. OSTRANDER. The two combined make up amortization.

This is a term that is required by the Federal Power Commission system of accounts.

We are working now on a proposed system of accounts that might reflect that as a combination of depreciation and amortization.

I think you are correct that amortization is a rather clearer idea of what the money is used for.

Chairman HAYDEN. You follow the practice, of course, of many Government agencies. All your revenue is deposited in the Treasury and you can expend that part which Congress allows you to expend by appropriation. That is what it amounts to.

Mr. OSTRANDER. Yes, sir.

RETURN OF POWER CAPITAL INVESTMENT

Mr. PEARL. The other chart that I will just touch on briefly is, I might say, a financial statement of our activity (indicating chart "Columbia River Power System—Return of Power Capital Investment.)

This chart indicates the percent that has been paid on each one of the projects for which we are the marketing agency for the power; also the Bonneville Administration itself.

To date our net investment for the Bonneville Administration is a little over $257 million; for the Bonneville project, $38 million; Columbia Basin, a little over $170 million; Hungry Horse a little over $84 million; Albeni Falls, a little over $26 million; McNary, a little over $227 million; and Detroit-Big Cliff, a little over $37 million, giving a total of $842,596,730, as of June 30, 1954.

Chairman HAYDEN. This "power capital investment" means the appropriation made by Congress?

Mr. PEARL. That is right. The last column is the net investment to date, as reduced by $170,409,916 repaid to date from a total investment of $1,013,006,646.

Those are the items that I wanted to cover to complete my brief presentation.

Are there any questions?

TOTAL EMPLOYEES

Chairman HAYDEN. Under the budget estimate, how many employees will Bonneville Power Administration have in the fiscal year 1956?

Mr. PEARL. 2,145. That is an increase of 35 over our present fiscal year. Those are permanent employees.

Chairman HAYDEN. Is this number in accord with the reorganization provided for by the Secretary?

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Mr. PEARL. Yes; it is.

Chairman HAYDEN. How does it compare with the number that were employed during the previous fiscal year?

Mr. PEARL. Are you referring to 1954 or 1953?

Chairman HAYDEN. 1954.

Mr. PEARL. I can give you an approximate figure of 2,700. Actually we reduced about 600.

Chairman HAYDEN. Was that made at one time or was it an orderly reduction over a period?

Mr. PEARL. It was in as orderly a method as we could use and live within our limitations.

Chairman HAYDEN. In other words, you are carrying out orders.

Mr. PEARL. Maybe I should say yes. We did have a period of time. That was done over a period of about 6 months.

CONTRACTS FOR ENGINEERING AND CONSTRUCTION

Chairman HAYDEN. Are you contracting any design engineering and construction work that was formerly performed by Bonneville employees?

Mr. PEARL. Yes; we are.

Chairman HAYDEN. Do you find that advantageous?

Mr. PEARL. Yes; our general thinking is that we would like to have a stable employment and we would like to carry our peaks by contracting rather than hiring and releasing people.

Chairman HAYDEN. Is the Government actually saving any money by this type of contract work?

Mr. PEARL. I have asked my chief engineer the same question. I am going to let him give you the answer.

FORCE ACCOUNT AND CONTRACT DESIGN COSTS

Mr. STARR. Senator Hayden, we have studied and analyzed our force account design costs very carefully. We think we know as accurately as can be determined what those costs are.

We are in process of very carefully analyzing the costs of our contract design.

So far we have had relatively little experience because we initiated our first design contract this January after having received the authority late in December, and we have, I believe, only two of those contracts completed as far as the initial phase of design is concerned.

Now, we must construct that project or those projects and we must energize them or put them into service and also during the construction process we discover corrections that must be made in design, mistakes that have been made inadvertently and, then, further, as we attempt to energize the facility, the T. and E. people, test and energization people, find further discrepancies that must be corrected.

So not until we have gone through the complete process from initiation of design until the completion of construction, do we know what the design costs us.

We are in the process of following that carefully in order that we may be able to answer this question completely when we have had sufficient experience.

Chairman HAYDEN. How does this new practice compare with the way the Reclamation does it at Denver?

Mr. STARR. I cannot answer that, sir, because I am not familiar exactly with how they carry on their design work.

CORPS OF ENGINEERS PROCEDURE

Chairman HAYDEN. Do you know how it compares with the Corps of Engineers?

Mr. STARR. Yes; I am quite familiar with that.

We patterned our process very much after their procedure for obtaining the contract design. We are quite closely associated with their northwest division and we spent a great deal of time with them analyzing their procedures.

Chairman HAYDEN. Do they follow this practice generally?

Mr. STARR. Yes, sir; they do.

Chairman HAYDEN. Is it a standard practice throughout the corps all over the United States?

Mr. STARR. Essentially so; yes, sir.

Chairman HAYDEN. The Corps of Engineers, of course, having the whole United States to operate in, could, in course of time, discover which firms are competent and which are not.

What is your situation with respect to the competency of the people in the Northwest?

Mr. STARR. We have several firms there recommended to us very highly by the Corps of Engineers. We have utilized the services of most of the firms that were recommended to us.

In fact, we have utilized the services of more firms than they have because we have more small jobs, additions to existing substations, and minor substation design.

Their projects are mainly large ones and consequently they have been dealing in general with the larger firms.

We have had sufficiently small jobs so that we could patronize some of the smaller concerns.

Our experiences have been that the larger firms, in general, do excellently. Some of the smaller firms are doing equally well for us and we are following a very careful procedure of analyzing their work, grading it, determining the added costs that we must apply to their product to find the total Government cost of doing the job.

Chairman HAYDEN. I handled Federal-aid to highway legislation five different times when we made the biennial appropriations and I am quite familiar with the operation of the Bureau of Public Roads. They do a lot of contracting but they still do a little bit themselves to be able to check up on the contractor.

Mr. STARR. May I add a point there, Senator, please?

Chairman HAYDEN. Yes.

Mr. STARR. In every case, we use the project engineers and their immediate assistants in our own staff to analyze very carefully the projects which we are proposing to put out to contract. In fact, we go through the procedure almost drawing by drawing as required and make our own estimate of the time required, the man-days required, and the cost required, the incremental cost of doing the job.

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When we negotiate with these people, we compare their estimates, of course, closely with our own, and have not accepted any that have been essentially in excess of our estimate.

Chairman HAYDEN. If you could not get a satisfactory bid, you do have the talent to do the job yourselves?

BASE DESIGN ORGANIZATION

Mr. STARR. We would like to do the thing that Dr. Pearl pointed out. We would like to establish a well-balanced base design organization so that we can keep them busy continuously on the more complicated and, you might say, more messy projects and put out to contract those clear-cut design peaks that we cannot so arrange normally to fall one after the other to give us a continuous load.

Chairman HAYDEN. Does this budget provide you with money enough to maintain that kind of design organization?

Mr. STARR. The present request will; yes, sir.

Chairman HAYDEN. Under the reorganization in the Department, they have turned over to the Solicitor all of the legal work. Do you have anybody to do your legal work?

Who does you legal work?

Mr. PEARL. Mr. Morthland as the regional solicitor is also the Bonneville general counsel.

As you know, the Bonneville Act provides that Bonneville have a general counsel. That is filled by Mr. Morthland.

Chairman HAYDEN. That is working all right?

Mr. PEARL. Yes.

Chairman HAYDEN. You have contracts to analyze?

Mr. PEARL. He has a staff, of course, in Portland, and they handle all of our legal work.

Chairman HAYDEN. It is operating satisfactorily?

Mr. PEARL. It is operating satisfactorily.

REDUCTION IN BUDGET REQUEST

Chairman HAYDEN. The budget estimate for construction is $15,353,000. This includes a reduction of $1,103,000 submitted in House Document No. 156. A copy of this document will be included in the record.

(The document referred to follows:)

[H. Doc. No. 156, 84th Cong. 1st sess.]

COMMUNICATION FROM THE PRESIDENT OF THE UNITED STATES TRANSMITTING PROPOSED AMENDMENTS TO THE BUDGET FOR FISCAL YEAR 1956 FOR THE DEPARTMENT OF DEFENSE—CIVIL FUNCTIONS AND FOR THE DEPARTMENT OF THE INTERIOR, INVOLVING A NET REDUCATION IN THE AMOUNT OF $3,183,000

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington 25, D. C., May 2, 1955.

The PRESIDENT,
The White House.

SIR: I have the honor to submit herewith proposed amendments to the budget for the fiscal year 1956 for the Department of Defense—Civil Functions and the Department of the Interior, involving a net reduction in the amount of $3,183,000, as follows:

DEPARTMENT OF DEFENSE—CIVIL FUNCTIONS

DEPARTMENT OF THE ARMY

Rivers and harbors and flood control

Budget page	Heading	Original estimate	Change to—	Increase (+) or decrease (−)
615	General investigations	$3,685,000	$3,905,000	+$220,000
617	Construction, general	357,675,000	355,375,000	−2,300,000

The budget document for fiscal year 1956 included an item under the heading "Proposed for later transmission" for the Rocky Reach Reservoir on the Columbia River in Washington as a proposed partnership project. The Senate Public Works Committee recently adopted a resolution requesting the Chief of Engineers to make a survey of the portion of the Columbia River in the vicinity of the proposed Rocky Reach Dam. This survey must be completed before a partnership proposal for the Rocky Reach project can be developed. The above amendment which increases the amount requested under the "General investigations" heading by $220,000 would provide funds necessary to accomplish work on this survey during fiscal year 1956. The survey would be completed by January 1, 1957.

The proposed reduction under the heading "Construction, general," includes a decrease of $800,000 in the new obligational authority required for fiscal year 1956 on the Louisville, Ky., local flood protection project from $1,275,000 to $475,000. The city of Louisville recently made known its desire to eliminate one section of flood wall from the construction plan. Elimination of this section will not affect the integrity of or protection provided by other sections of the Louisville local flood-protection project.

In addition, the reduction under this heading includes an amount of $1,500,000 which is based on a decrease in the requirements for fiscal year 1956 on the Folsom multiple-purpose reservoir in California from $4,150,000 to $2,650,000. A recent review of construction activities on the Folsom project, which is now well advanced, reveals that the cost estimate on which the 1956 budget request was based can now be reduced by $1,500,000.

The amendment under the heading "Department of Defense—Civil Functions, Rivers, and harbors and flood control, Construction, general," in my letter of April 11, 1955 (H. Doc. 126, p. 8), proposed a reduction of $800,000. This amount is included in the amendments proposed herein and the reduction proposed in my letter of April 11 should be canceled.

DEPARTMENT OF THE INTERIOR

Bonneville Power Administration

Budget page	Heading	Original estimate	Change to—	Decrease
744	Construction	$16,456,000	$15,353,000	$1,103,000

The construction program for fiscal year 1955 and fiscal year 1956 included in the 1956 budget was based on schedules worked out by the Bonneville Power Administration in cooperation with its customers. Since the fall of 1954, demands for power in the Coos Bay, Moses Lake, and The Dalles areas have increased because of unforeseen circumstances resulting in need for new service items and for acceleration of other construction features of the program. A recent review of the program shows that certain other facilities can be eliminated or deferred to a later date. These adjustments as well as substantial savings in construction costs for the entire program results in the reduction of $1,103,000.

I recommend that the foregoing proposed amendments be transmitted to the Congress.

Respectfully yours,

ROWLAND HUGHES,
Director of the Bureau of the Budget.

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JUSTIFICATION

Senator HAYDEN. In view of the estimated carryover of the $11,997,000, the total construction program proposed for the fiscal year is $27,518,000.

I will put the justification in the record. I think it will save time. If you want to make some statement about it, you may do so.

(The justification referred to follows:)

Construction

Appropriation Act, 1955	$24,314,000
Transferred to "Salaries and expenses, Office of the Solicitor, Interior"	—120,125
Adjusted appropriation	24,193,875
Decreases: Construction program	24,193,875
Base 1956	0
Increases: Construction program	15,353,000
Budget estimate, 1956	15,353,000

Analysis by activities

Activities	Adjusted appropriation	Decreases	Subtotal	Estimate, 1956	Increases
1. Construction in progress	$19,395,910	$19,395,910	0	$7,286,000	$7,286,000
2. New construction	4,415,540	4,415,540	0	7,635,000	7,635,000
3. General plant	382,425	382,425	0	432,000	432,000
Total	24,193,875	24,193,875	0	15,353,000	15,353,000

1956 Construction Program Summary

Funds estimated to be available in 1956

Budget estimate for additional appropriation for construction	$15,353,000
Estimated unobligated balance in 1955 to be available in 1956	11,997,000
Reimbursements from proceeds of sales of personal property	68,000
Reimbursements from other accounts	100,000
Total funds estimated to be available in 1956	27,518,000

Item No.	Facility	Estimated cost	Obligations to June 30, 1953	Program, fiscal year 1954	Program, fiscal year 1955	Program, fiscal year 1956				Balance to complete	Page reference
						Construction in progress	New construction	General plant	Total		
100	Major grid:										
101	Grand Coulee-Midway No. 3	$4,605,000	$4,542,000	$44,000	$19,000						
105	Grand Coulee-Columbia-Olympia	14,270,000	13,376,000	745,000	149,000						
106	Grand Coulee-Snohomish No. 2	13,329,000	12,893,000	371,000	65,000						
108	Chief Joseph-Snohomish No. 3 and Chief Joseph-Covington No. 1	29,428,000	7,076,000	5,591,000	4,906,000	$4,256,000			$4,256,000	$7,599,000	BP20
109	Lower Olympic Peninsula service	4,340,000	1,354,000	(39,000)	1,387,000	1,154,000			1,154,000	484,000	BP21
111	Bellingham substation	1,794,000	464,000	1,002,000	328,000						BP23
112	Covington-Olympia	1,074,000	1,031,000	32,000	11,000						
113	Snohomish substation additions	1,423,000	17,000				$790,000		790,000	616,000	BP23
115	Tacoma tap	707,000	558,000	43,000	106,000						
116	The Dalles area service	7,053,000	386,000	938,000	1,524,000	2,813,000	87,000		2,900,000	1,305,000	BP24
117	McNary substation	4,974,000	2,590,000	914,000	1,414,000	310,000			310,000	9,000	BP26
118	McNary-Ross	13,046,000	4,980,000	5,548,000	1,471,000	705,000			705,000		BP26
119	Southeast Portland area service	20,683,000	12,662,000	1,525,000	1,980,000	1,882,000			1,882,000	2,634,000	BP27
121	Ross-St. Johns conversion	4,056,000	4,195,000	(178,000)	39,000						
122	Ross-St. Johns-Bethany	3,247,000	270,000	863,000	751,000	1,182,000			1,182,000	181,000	BP28
123	Upper Willamette Valley service	34,896,000	25,667,000	5,713,000	3,053,000	463,000			463,000		BP30
125	Oregon City-Chemawa	1,655,000			87,000	169,000			169,000	1,399,000	BP31
126	Big Eddy-Bethany	8,804,000					100,000		100,000	8,704,000	BP32
130	Southwestern Oregon loop service	7,156,000	6,083,000	900,000	173,000						
132	Coos Bay area service	2,889,000	395,000	407,000	1,121,000	680,000			680,000	286,000	BP33
134	Alvey-Reston	4,672,000					2,679,000		2,679,000	1,993,000	BP34
136	McNary-Franklin-(McNary-Walla Walla)	2,333,000	377,000	11,000	12,000	1,297,000			1,297,000	636,000	BP36
137	McNary-La Grande	4,530,000	3,535,000	290,000	112,000		564,000		564,000		
141	Midway-Moxee	719,000	283,000	415,000	21,000						
142	Columbia substation additions	1,578,000					981,000		981,000	597,000	Amended
143	Spokane area service	1,611,000	379,000	561,000	165,000	336,000	114,000		450,000	56,000	BP37
145	Hungry Horse-Hot Springs	3,108,000	3,146,000	(61,000)	23,000						

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'Funds estimated to be available in 1956—Continued

Item No.	Facility	Estimated cost	Obligations to June 30, 1953	Program, fiscal year 1954	Program, fiscal year 1955	Program, fiscal year 1956				Balance to complete	Page reference
						Construction in progress	New construction	General plant	Total		
	Major grid—Continued										
146	Hot Springs switching station	$889,000	$837,000	$34,000	$18,000						
148	Hot Springs-Spokane No. 1	7,295,000	7,331,000	(82,000)	35,000	$11,000			$11,000		BP38
150	System reactive facilities	3,658,000	1,577,000	910,000	797,000	352,000			352,000	$22,000	BP38
151	Main system neutral boosters	389,000			244,000	127,000			127,000	18,000	BP40
	Subtotal	210,211,000	116,004,000	26,497,000	20,119,000	15,737,000	$5,315,000		21,052,000	26,539,000	
200	Seattle (northwest) area:										
204	Upper Olympic Peninsula service	2,486,000	64,000	(8,000)		42,000			42,000	2,388,000	BP42
205	Snohomish substation terminal	158,000					158,000		158,000		BP42
206	Covington substation additions	255,000	149,000	76,000	30,000						
209	Olympia-Aberdeen No. 2	1,195,000					100,000		100,000	1,095,000	BP43
211	Shelton-Kitsap-Bremerton No. 2	1,125,000	700,000	342,000	83,000						
215	Lewis County service	1,750,000	109,000		93,000	1,033,000			1,033,000	515,000	BP44
216	Chehalis substation additions	377,000	331,000	33,000	13,000						
218	Ilwaco-Long Beach area service	663,000	47,000	90,000	252,000	274,000			274,000		BP45
219	Raymond-Aberdeen	1,150,000	1,045,000	54,000	11,000					40,000	
222	Okanogan County	371,000	123,000	99,000	116,000	33,000			33,000		BP45
223	Moses Lake service	266,000	12,000				227,000		227,000	27,000	BP46
224	Columbia substation	1,392,000	1,379,000	2,000	11,000						
227	Frenchman Hills area service	546,000	79,000		33,000	200,000			200,000	234,000	BP48
229	Columbia-Ellensburg	801,000	665,000	108,000	28,000						
234	Quincy-Burke	239,000	48,000	17,000	53,000	121,000			121,000		BP48
239	Warden substation additions	100,000	70,000			3,000			3,000	27,000	BP49
299	Other transmission facilities	789,000	135,000	71,000	305,000	35,000	200,000		235,000	43,000	BP49
	Subtotal	13,663,000	4,956,000	884,000	1,028,000	1,741,000	685,000		2,426,000	4,369,000	
300	Portland (southwest) area:										
301	North Bonneville substation additions	250,000	155,000	63,000	32,000						
303	Longview substation additions	812,000	326,000				368,000		368,000	118,000	BP54
304	Troutdale substation additions	150,000	124,000	17,000	9,000						BP55
305	J. D. Ross substation additions	913,000	698,000	175,000	40,000						
307	Clark County and carborundum service	628,000	274,000	169,000	95,000	60,000			83,000	30,000	BP55
308											
312	Longview area service	976,000	805,000	76,000	17,000	78,000			78,000		BP56
316	Alcoa substation circuit-breaker replacements	89,000					89,000		89,000		BP57
318	Bethany-Forest Grove No. 2	333,000					133,000		133,000	200,000	BP57
325	Tillamook service	1,845,000	458,000	218,000	774,000	357,000			357,000	38,000	BP58
330	North Santiam Valley	383,000	267,000	83,000	33,000						

318	Bethany-Forest Grove No. 2	333,000										BP57
325	Tillamook service	1,845,000	458,000	218,000	774,000	357,000	133,000		133,000	200,000	BP57	
330	North Santiam Valley	383,000	267,000	83,000	33,000				357,000	38,000	BP58	
332	Toledo substation additions	170,000	141,000	1,000	24,000	4,000						
334	Eugene-Reedsport area service	1,817,000	1,321,000	155,000	215,000	124,000			4,000		BP59	
338	Middle Fork Willamette River projects	1,885,000	763,000	867,000	255,000				124,000	2,000	BP59	
339	Springfield substation additions	196,000	2,000		85,000	48,000						
341	McKinley-Gold Beach	2,222,000	1,909,000	234,000	76,000	3,000			48,000	61,000	BP60	
399	Other transmission facilities	1,241,000	126,000	175,000	446,000	122,000	301,000		3,000		BP60	
	Subtotal	13,910,000	7,369,000	2,233,000	2,101,000	796,000	891,000		423,000	71,000	BP60	
600	Spokane area—upper portion (northeast area):								1,687,000	520,000		
621	Creston transformer replacement	37,000	22,000									
622	Glenn H. Bell substation additions	4,389,000	4,014,000	327,000	48,000		15,000					
629	Valley Way substation additions	90,000	36,000		7,000	47,000			15,000		BP67	
632	Albeni Falls loop	314,000	126,000	122,000	66,000							
636	Columbia Falls service	229,000	36,000	99,000	89,000	5,000			47,000		BP67	
637	Kalispell substation additions	173,000	3,000									
699	Other transmission facilities	454,000	57,000	88,000	181,000	66,000	86,000		5,000		BP68	
	Subtotal	5,686,000	4,294,000	636,000	391,000	118,000	61,000		86,000	84,000	BP68	
700	Spokane area—lower portion (southeast area):						162,000		127,000	1,000	BP70	
701	Midway substation additions	1,983,000	1,452,000	359,000	161,000	11,000			280,000	85,000		
702	Grandview substation additions	275,000	74,000	10,000	50,000	138,000						
703	Highlands transformer replacement	100,000							11,000		BP72	
705	Benton County service	153,000	72,000	31,000	50,000		70,000		138,000	3,000	BP72	
709	Franklin County	854,000	655,000	118,000	81,000				70,000	30,000	BP72	
710	Franklin transformer replacement	143,000	8,000		74,000	43,000					BP73	
715	Ringold transformer replacement	103,000							43,000	18,000	BP73	
716	Goldendale substation additions	154,000	34,000			41,000	70,000		70,000	33,000	BP74	
799	Other transmission facilities	853,000	339,000	82,000	238,000	42,000	150,000		41,000	79,000	BP75	
	Subtotal	4,618,000	2,634,000	600,000	654,000	275,000	290,000		192,000	2,000	BP75	
800	General system facilities:								565,000	165,000		
810	General structures and improvements	1,438,000	172,000	274,000	695,000	131,000	120,000					
820	Communication facilities	3,391,000	1,092,000	275,000	1,140,000	433,000	122,000		251,000	46,000	BP80	
830	Tools and equipment	2,152,000		862,000	790,000			$500,000	555,000	329,000	BP85	
840	Preliminary engineering	158,000		51,000	57,000		50,000		500,000		BP88	
850	Portland operations facilities	1,450,000	448,000	681,000	321,000				50,000		BP94	
860	Portable emergency transformers	319,000			267,000	52,000						
870	Escalation	50,000			50,000				52,000		BP95	
	Subtotal	8,958,000	1,712,000	2,143,000	3,320,000	616,000	292,000	500,000	1,408,000	375,000		

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Funds estimated to be available in 1956—Continued

Item No.	Facility	Estimated cost	Obligations to June 30, 1953	Program, fiscal year 1954	Program, fiscal year 1955	Program, fiscal year 1956				Balance to complete	Page reference
						Construction in progress	New construction	General plant	Total		
	Fiscal year 1954 obligations chargeable to items not in the 1955 and 1956 programs	$1,101,000		$1,101,000							
	Reimbursable work for other accounts	367,000		167,000	$100,000	$100,000			$100,000		
	Subtotal	258,514,000	$136,963,000	34,261,000	27,263,000	19,383,000	$7,635,000	$500,000	27,518,000	$32,503,000	
	Less comparative transfer to "Salaries and expenses, Office of the Solicitor, Interior"	(109,000)		(109,000)							
	Grand total	258,405,000	136,963,000	34,152,000	27,263,000	19,383,000	7,635,000	500,000	27,518,000	32,503,000	
	Funds available:										
	Appropriation or estimate			38,866,000	24,314,000	7,286,000	7,635,000	432,000	15,353,000		
	Funds carried over from prior years			9,979,000	14,857,000	11,997,000			11,997,000		
	Proceeds from sales of personal property			106,000	109,000			68,000	68,000		
	Reimbursements from other accounts			167,000	100,000	100,000			100,000		
	Total funds available			49,118,000	39,380,000	19,383,000	7,635,000	500,000	27,518,000		
	Less:										
	Unobligated balance carried forward			14,857,000	11,997,000						
	Transfer to Office of the Solicitor			109,000	120,000						
	Total, program			34,152,000	27,263,000	19,383,000	7,635,000	500,000	27,518,000		

CONSTRUCTION JUSTIFICATION

The construction program for fiscal year 1956 provides for the initiation of new major grid facilities which must be in service by January 1959. This allows approximately 3½ years to bring them to completion, the period needed for construction of major transmission projects under existing conditions. The program also provides for facilities of lesser scope on shorter construction schedules reflecting current experience. Plans for all electrical facilities are related to projected load conditions and match generation schedules of the Bureau of Reclamation and the Corps of Engineers.

At the end of fiscal year 1954 there were 6,377 circuit miles of transmission lines in service. Work underway and new facilities proposed in this budget will add 1,430 miles of line. Thus by January 1959 the transmission system will encompass 7,807 circuit miles of transmission lines.

The scheduled increase in power facilities of about 1,330,000 kilowatts of prime power between 1954–55 and 1958–59 will be sold principally to distributing utilities, publicly and privately owned. Most of this electric energy will be consumed by residential and farm customers. General industrial expansion to be supplied by the Bonneville Power Administration, based upon contracts for firm power executed or agreed to some time ago, is limited to three operations, a ferronickel plant near Riddle, Oreg., which commenced production during the past summer; an aluminum plant at Columbia Falls, Mont., which is expected to be in operation in the spring of 1955; and a proposed new aluminum reduction mill at The Dalles, which is not yet under construction. In addition the Hanford Engineering Works of the Atomic Energy Commission, also supplied by the Administration, is expanding.

BASIS FOR COST ESTIMATES

Estimates for the fiscal year 1956 construction program were prepared using cost levels of the period January to July 1954. It is expected that material costs will, in general, remain at this level which is lower than the levels of preceding periods.

CUSTOMER SERVICE ITEMS

All proposed customer service budget items have been developed jointly by the staffs of the Bonneville Power Administration and its customers. These items represent the part of the total new facilities, shown to be needed by joint Administration-customer studies, which it is the Administration's responsibility to provide under its customer service policy. Construction by customers of related new subtransmission and distribution facilities necessary to carry the power from Administration points of delivery to ultimate consumers has been agreed upon and scheduled in conjunction with the joint studies. Energization dates proposed for Administration facilities match these customers' schedules for construction of their own facilities.

Also, all proposed items meet, and in most cases materially exceed, the Administration's standards of minimum feasibility. That is, cumulative revenues from the sale of power through the new facilities during the initial 10-year period of service are estimated to be sufficient to cover total annual costs of the specific facilities, and, in addition, to contribute to the costs of generation and main grid transmission.

Major grid

In order to determine the major grid facilities to be included in the 1956 construction program, detailed studies of the combined transmission systems of the region were made in cooperation with the major electric utilities. These studies were conducted on the basis of two different sets of assumptions. (1) Only plants existing under construction were included in the generation, and loads included only requirements for normal increases of residential, commercial, farm, and small industrial customers. Industrial loads adding 10,000 kilowatts or more in any 1 year were excluded from the estimates. (2) Proposed plants of the non-Federal utilities were added to the generation and to match this new generation new industry loads in excess of 10,000 kilowatts were added, together with the general load increases accompanying new industry. The amount and location of these new industries were mutually agreed upon by the non-Federal utilities and the Bonneville Power Administration.

The system additions included in this budget were shown by these studies to be the most economical to supply the estimated loads under assumption (1), with an acceptable grade of service. The Federal transmission system with these

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additions will be adequate to provide integrated operation of all major power facilities in the Pacific Northwest. The construction program would have to be reappraised if, prior to January 1959, additional generation were added over and above that included in the minimum study. Although no changes in the projects planned would be required, additional facilities would be needed.

According to the present installation schedule, the Federal Government will have available from the Columbia and Willamette River plants 6,401,000 kilowatts of generating capacity in January 1959, and the transmission grid additions are scheduled and designed to coordinate with this generation program. This is an increase of approximately 2,652,000 kilowatts for the period January 1955 to January 1959. The system peak demand on the Federal system for the corresponding period is estimated to increase from 3,631,000 kilowatts to 5,479,000 kilowatts.

Peak generating capacity is the broad basis for the design of the Administration's transmission system because of the characteristics of storage operations. In a storage system there are wide seasonal, daily and hourly variations in the production of the several plants. For example, the peaking capability at Grand Coulee varies from 2,300,000 kilowatts with a full reservoir to 1,400,000 kilowatts after the reservoir has been drawn down. A reduction at Grand Coulee necessitates a shift of peaking generation to other plants in the system such as McNary and Chief Joseph. Accordingly, sufficient transmission capacity between each plant and the main system must be provided to utilize the full machine capability of the plant; and the aggregate of the machine capacities of all of the plants will be above the maximum coincidental demands of the system to permit this flexibility of operation in the scheduling of generation between the various plants. The excess also insures continuity of service in the event of either generation or transmission outages, serving as a reserve for emergencies and scheduled maintenance.

The following tabulation shows regional power deliveries, non-Federal generation, and requirements to be supplied by the Bonneville Power Administration. The regional deliveries increase 28 percent over a 4-year period or approximately 6 percent per year. In 1959 it will be possible to replace all steam generation except spinning reserves.

Regional peak requirements from Bonneville Power Administration at time of maximum demand of year, kilowatts

[Based on median-year water conditions]

	Winter 1954–55			Winter 1958–59			Increased requirements from BPA
	Regional deliveries [1]	Non-Federal generation [2]	Required from BPA	Regional deliveries [1]	Non-Federal generation [3]	Required from BPA	
Puget Sound	1,801,000	1,067,000	734,000	2,366,000	1,124,000	1,242,000	508,000
Portland-Longview	1,626,000	361,000	1,265,000	1,991,000	361,000	1,630,000	365,000
Southwest Oregon	294,000	41,000	253,000	403,000		403,000	150,000
Spokane	912,000	449,000	463,000	962,000	369,000	593,000	130,000
Central Washington and central and eastern Oregon	671,000	21,000	650,000	1,195,000	21,000	1,174,000	524,000
Western Montana	670,000	538,000	132,000	737,000	478,000	259,000	127,000
Subtotal	5,974,000	2,477,000	3,497,000	7,654,000	2,353,000	5,301,000	1,804,000
Main grid losses not included in area requirements			134,000			178,000	44,000
Peak generation			3,631,000			5,479,000	1,848,000

[1] Includes loads and area losses less diversity.
[2] All steam replaced except spinning reserves, Puget Sound Power & Light Co., Shuffleton plant, and 60,000 kilowatts in Montana. Includes 41,000 kilowatts California-Oregon Power Co. Toketee generation temporarily connected to BPA system.
[3] All steam replaced except spinning reserves.

NEW STARTS

Chairman HAYDEN. You may put a statement in the record about all your new facilities.

Do you have any comment you want to make in addition to that?

Mr. PEARL. No, not that I think of, if we can put that all in the record.

(The statement referred to follows:)

SUMMARY STATEMENT OF PRINCIPAL FISCAL YEAR 1956 NEW STARTS

Snohomish substation additions (item 113)

It is proposed to install a second 230/115-kilovolt, 150,000/250,000-kilovolt-ampere transformer bank in the Snohomish substation, which serves the Puget Sound Power & Light Co. and the Snohomish County Public Utility District. By the winter of 1958–59 the loads on the station will exceed the forced-cooled capacity of the existing transformer bank. Energization of the second bank is scheduled for October 1958 to prevent overload of transformer bank No. 1.

The Dalles area service (item 116)

A 1-mile, 115 kilovolt transmission line is proposed to connect the 2 fishway generators and the first two main generators to the Big Eddy switching station. Energization is scheduled in November 1956.

It is also proposed to install a second 6,000-kilovolt-ampere, 115–12.5-kilovolt transformer at The Dalles substation for service to the Wasco Electric Cooperative and the Northern Wasco County PUD. Energization is scheduled for September 1955.

Big Eddy-Bethany (item 126)

It is planned to construct a 108-mile, 345-kilovolt transmission line, with terminals at Big Eddy and Bethany substations. Initial operation at 230-kilovolt is scheduled for December 1958 to provide transmission capacity necessary to transmit the power output of the Dalles Dam.

Alvey-Reston (item 134)

Construction of 72 miles of 230-kilovolt line with terminal facilities at J. P. Alvey substation and a 230/115-kilovolt substation at Fairview is proposed. Existing 115-kilovolt facilities serving the southwest coastal area will be incapable of supplying the area loads by the fall of 1957. Energization of the proposed 230-kilovolt facilities is scheduled in October 1957.

Roundup and La Grande substation additions (item 137)

The Idaho Power Co. has requested a 230-kilovolt interconnection with the Administration's system at its La Grande substation. Such an interconnection will permit the realization of important regionwide benefits by the exchange of seasonal surplus energy between the Southern Idaho-Utah and Oregon-Washington areas. It is proposed to energize the interconnection in May 1956.

Columbia substation additions (item 142)

It is proposed to install a second 150,000-kilovolt-ampere, 230/115-kilovolt transformer at the Columbia substation. Loads forecasted for June 1957 are in excess of the forced-cooled rating of the present transformer. Therefore, it is proposed to complete the installation of a second transformer in April 1957.

Snohomish substation terminal (item 205)

It is proposed to install a 115-kilovolt terminal position with circuit breaker and metering in the Administration's Snohomish substation for service to the Snohomish County PUD. The District has constructed a 115-kilovolt line from this substation to the Scott Paper Co. plant. A temporary terminal for the District's line is being provided at its expense in the Snohomish Substation in June 1955. The permanent terminal position is presently scheduled for June 1956.

Olympia-Aberdeen No. 2 (item 209)

The construction of a second 115-kilovolt transmission line between Olympia and Aberdeen is planned for energization in October 1958 at which time a second, 30,000-kilovolt-ampere, 115–22-kilovolt transformer bank will be installed in the Aberdeen substation. Construction of the second line will improve voltage conditions in the Aberdeen area, and will reduce the power losses experienced by the Administration over the existing heavily loaded line.

Moses Lake service (item 223)

Pelican Horn substation.—Grant County Public Utility District now serves its loads in the Moses Lake area from the existing 24,000-kilovolt-ampere Moses Lake

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substation. Load estimates indicate that this substation will be overloaded in 1956. Comparative cost studies indicated that it would be more economical to construct a new 20,000-kilovolt-ampere substation, located on the Washington Water Power Co.'s line, rather than to expand the existing Moses Lake substation. Accordingly, the new Pelican Horn substation is scheduled for completion May 1956.

Moses Lake metering.—It is proposed to install metering and telemetering equipment at the point of interconnection between the facilities of the Administration and the Washington Water Power Co. near Moses Lake. This interconnection in the past has been operated as normally open; however, load flow studies indicate that closing of this interconnection will permit deferral for 1 year of additional BPA transmission capacity into the area. Energization is scheduled for April 1957.

Port Angeles substation additions (item 299b)

The city of Port Angeles, located in Clallam County, Wash., became a customer of the Administration on January 1, 1955, at which time the city had requested that a terminal position be provided for its use in the Administration's Port Angeles substation. Since time did not permit this installation, a temporary connection was made between the city's facilities and those of the Clallam County PUD. It is proposed to install a 69-kilovolt terminal position, complete with oil circuit breaker and metering, for service to the city, with installation scheduled for February 1956.

Longview substation additions (item 303)

Cowlitz County Public Utility District receives service from the Administration's Longview substation through a 50,000-kilovolt-ampere, 230–69-kilovolt transformer. A revised load estimate on the district's system indicates that the district's total load will exceed the forced-cooled rating of the Administration's transformers in the winter of 1956. To prevent overloading these transformers, it is proposed to install a second 50,000-kilovolt-ampere, 230–69-kilovolt transformer in the Longview substation. In addition, the relocation of a portion of the facilities in the control house will be required. This work is scheduled for completion November 1956.

Bethany-Forest Grove No. 2 (item 318)

It is proposed to construct a second 115-kilovolt transmission line, 10 miles in length, between Bethany and Forest Grove. The present 115-kilovolt Bethany-Forest Grove line will not have sufficient capacity to carry the area loads in the fall of 1957. Energization of a second circuit is therefore scheduled for October 1957 to prevent overloading of the existing line No. 1.

Chemawa substation (item 399b)

The Administration serves Portland General Electric Co. from the Chemawa substation through one 57-kilovolt feeder position provided by BPA and a second position provided at the company's expense. The company has requested a third feeder position to be provided at its expense in 1956. At the time this third feeder position is completed, the Administration must provide coordination between its system and that of the company. It is proposed, therefore, that the existing oil circuit breaker, now located in the transformer bank position, be removed and installed in the initial 57-kilovolt feeder position. Scheduled energization is September 1956.

Creston transformer replacement (item 621)

The Lincoln County Electric Cooperative receives service from the Administration's Creston-Davenport-Almira 34.5-kilovolt line which is energized by means of a 3,000-kilovolt-ampere, 115–34.5-kilovolt transformer in the Administration's Creston substation. Loads of the cooperative served from this line will overload the existing transformer in 1957. It is proposed to replace the present transformer with a 6,000-kilovolt-ampere, 115–34.5-kilovolt transformer, with energization scheduled for June 1956.

Kalispell substation additions (item 637)

The Kalispell substation, consisting of two 6,000-kilovolt-ampere, 115–34.5-kilovolt transformers, serves power requirements of the Pacific Power & Light Co., Flathead Electric Cooperative, and the Lincoln Electric Cooperative in the vicinity of Kalispell, Mont. Combined loads of these three utilities are exceeding the capacity of existing transformation. It is therefore proposed to install a new 15,000-kilovolt-ampere, 115–34.5-kilovolt transformer in the Kalispell substation. Energization of this new facility is scheduled for July 1957.

Highlands transformer replacement (item 703)

Benton County Public Utility District serves its loads in the area west of Kennewick, Wash., from the 6,000-kilovolt-ampere, 115–12.5-kilovolt Highlands substation. Loads of the district in this area are increasing rapidly, and will overload the existing transformation in 1957. It is proposed to suplement the the present capacity by replacing the existing 6,000-kilovolt-ampere transformer with a 12,000-kilovolt-ampere transformer. Energization of the new facility is scheduled for July 1957.

Since the loads in January of 1957 will exceed the capacity of the existing transformer, the district has agreed to temporarily pick up approximately 2,000 kilowatts over its 12.5-kilovolt distribution line from Kennewick so as to reduce the load on the Highlands substation to within its forced-cooled rating.

Ringold transformer replacement (item 715)

Power requirements of the Big Bend Electric Cooperative, Franklin County Public Utility District, and the Bureau of Reclamation are served from the Administration's 6,000-kilovolt-ampere Ringold substation. Plans of the Bureau for development of the Columbia Basin project in this area will bring land under irrigation at an early date. The resultant utility loads of the cooperative and the district necessitate the installation of additional transformer capacity in this substation. Replacement of the existing 6,000-kilovolt-ampere transformer with one of 12,000-kilovolt-ampere capacity is scheduled for March 1957.

Dayton substation additions (item 799b)

Columbia County REA supplies its Dayton service area from the 1,500-kilovolt-ampere, 66–12.5-kilovolt Dayton substation. This substation is energized from a tap on Pacific Power & Light Co.'s 66-kilovolt transmission line. Load estimates indicate that loads on this substation will exceed the forced-cooled capacity in the summer of 1956. It is proposed therefore to install a second 1,500-kilovolt-ampere transformer in this substation prior to this peak load period. Energization is scheduled for April 1956.

Gilmer transformer replacement (item 799c)

The 1,500-kilovolt-ampere, 66–12.5-kilovolt Gilmer substation supplies the Klickitat County Public Utility District's Husum-Troutlake area system. Load estimates indicate that the forced-cooled capacity of the existing transformer will be exceeded in the winter of 1955. Accordingly, it is proposed to increase the capacity of this substation by replacing the existing 1,500-kilovolt-ampere transformer with one of 3,000-kilovolt-ampere capacity. It is proposed to energize this new transformer in June 1956.

Benton-Richland line relocation (item 799d)

Through negotiations with the Atomic Energy Commission the Administration has acquired the Richland-Benton switching station 115-kilovolt line constructed by the Commission. A portion of this line was originally constructed along a route which, because of the expansion of the city of Richland, has now become valuable residential property. The Commission has requested that the Administration relocate approximately 2.3 miles of this line. It is proposed to complete this work in December 1955.

INTERTIE WITH IDAHO POWER CO.

Chairman HAYDEN. I note that the funds are requested for intertie with the Idaho Power Co.

As I recall funds for this purpose were denied by Congress when requested in fiscal year 1953.

Will this facility serve the same purpose as the one proposed in the budget for 1953?

Mr. PEARL. The intertie for which we are entering into a contract is really a power exchange in which case the Idaho Power Co. will build the line from Baker to La Grande.

It will be necessary for us to put in the switching gear at La Grande. It does not carry firm power. It carries only what I will call dump power.

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We will supply Idaho with power during the irrigation season when we have excess power or, in other words, power that is going down the river, and in other times of the year if necessary, we could draw on them for power in case of an emergency. So it really becomes a power exchange.

Chairman HAYDEN. How is the money recovered for the work that was done?

Mr. PEARL. That we do?

Chairman HAYDEN. Yes, that you do and that they do.

REVENUE FROM DUMP POWER

Mr. PEARL. They pay us for this dump power at the rate of two and a half mills so it becomes revenue for Bonneville.

Chairman HAYDEN. That is one other point which we want to develop.

Does that provide service for any additional preferred customer?

Mr. PEARL. The tie does not carry any firm power. It is just this power that we supply when we have it or get from them when we need it.

We estimate that this revenue that we will receive from this will amount to about $600,000 a year for power that is now going to waste.

TOTAL INVESTMENT

CHAIRMAN HAYDEN. How much of an investment are you making?

Mr. PEARL. It is about that much. It is between $500,000 and $600,000. In other words, 1 year's revenue will pay our total investment.

Chairman HAYDEN. How are they going to get their money back?

Mr. PEARL. They sell this power to the people who irrigate.

Chairman HAYDEN. So it will be profitable to them.

Mr. PEARL. It is profitable to Bonneville and to Idaho Power and to the people living down in that irrigated area.

You see, the flow in the Snake is low during that time of year when the flow on the Columbia is high.

Chairman HAYDEN. Now let us take up your operation and maintenance estimate.

OPERATION AND MAINTENANCE

The budget estimate for operation and maintenance is $6,650,000, an increase of $450,000 over last year.

I will include the justification for operation and maintenance in the record.

(The justification referred to follows:)

Operation and maintenance

Appropriation act, 1955	$6,200,000
Transferred to "Salaries and expenses, Office of the Solicitor, Interior"	−57,385
Adjusted appropriation	6,142,615
Budget estimate, 1956	6,650,000

Analysis by activities

Activities [1]	Adjusted appropriation	Decreases	Subtotal	Estimate 1956	Increases	Page reference	
						Table	Justification
1. System operation and maintenance	$5,296,115	$15,800	$5,280,315	$5,816,000	$535,685	BP102	BP102
2. Power contracts and rates	252,500	31,800	220,700	229,000	8,300	BP116	BP116
3. General administration	594,000	8,800	585,200	605,000	19,800	BP118	BP118
Total	6,142,615	56,400	6,086,215	6,650,000	563,785		

[1] The activity categories are different from those used in previous years. Pursuant to recommendations made by members of the House and Senate Subcommittees on Interior Appropriations, that the nomenclature of activities be changed to more clearly reflect the actual types of work performed, the revised activity shedule shown was prepared by the Department of the Interior and approved by the Bureau of the Budget for use by power marketing agencies.

Operation and Maintenance Program Justification

For fiscal year 1956, the estimates of the Bonneville Power Administration for operation and maintenance of the transmission system, power contracts, rates, and general administration activities total $6,650,000, an increase of $507,385 over the program for fiscal year 1955. The estimates will provide for maintenance of existing and new facilities at a minimum level required for continued safe operation and prevention of excessive and costly deterioration, and for effective management of the system.

The following table summarizes basic program data underlying operation and maintenance program workloads:

	Actual, fiscal year 1954	Estimated, fiscal year 1955	Estimated, fiscal year 1956
Revenues [1]	$45,216,652	$52,832,000	$61,473,000
Average electric plant in service	$267,497,000	$304,269,000	$344,565,000
Number of customers at end of year	114	117	118
Points of delivery at end of year	307	324	333
Sales of energy (millions of kilowatt-hours, median water assumed	18,764	22,575	26,623

[1] The 1954 revenue figures are based on actual water conditions, and the 1955 and 1956 figures are based on assumed median water conditions. These are revenues of the Bonneville Power Administration and do not include revenues collected directly at generating plants.

1. System operation and maintenance

Subactivity	Adjusted appropriation	Decreases	Subtotal	Estimate, 1956	Increases
(a) System operations	$1,944,815		$1,944,815	$2,138,500	$193,685
(b) System maintenance	2,723,600		2,723,600	3,028,600	305,000
(c) Power resources and requirements	209,500	$2,700	206,800	210,000	3,200
(d) General services and supervision	418,200	13,100	405,100	438,900	33,800
Total	5,296,115	15,800	5,280,315	5,816,000	535,685

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System operation and maintenance includes the scheduling and dispatching of power, the operation of substations, the maintenance of transmission lines, substations, and other electrical facilities, load estimating, the integration of resources, and system engineering.

Transmission facilities of the Administration are being expanded as increased generating capacity from Federal hydroelectric projects becomes available. It will be necessary to man newly energized substations, schedule and dispatch the increased power supply, and provide service through additional points of delivery and interconnection. Additional maintenance personnel will be required throughthe transmission area to maintain the expanded system at levels adequate to insure safe and continuous operation. Power resources and requirements work will be continued to obtain the fullest utilization of generating capacity, streamflows, and stored water.

(a) *System operations, $2,138,500*

This subactivity encompasses the general direction of operation of the electrical system including power dispatching and scheduling, operation of substations, and leasing of power facilities for transmittal of electrical energy in the 1956 fiscal year. An additional amount of $193,685 will be required. This added requirement is brought about by growth of the system, including substations and transmission lines, and additional generation and sales which result in added workload in power dispatching. This growth is shown on tabulations which are a part of this presentation.

Supervision includes the central staff whose efforts are devoted to power policies and programs, supervision of operations, power dispatching and scheduling, and general administrative tasks associated with central management.

The scheduling and dispatching staff controls the transmission of power from Federal generation plants to points of delivery at load centers, schedules energy deliveries for sales and interchange with connected utilities, determines and orders all generation and plant loadings, orders the release of stored water, and controls the loading of the transmission system. Organization consolidation affecting this work and the power resources work are expected to provide more efficient use of staff which will permit handling the daily power scheduling of two new generating plants and several hundred thousand kilowatts of additional capacity in existing plants with the present available staff. Therefore, no increases are requested in the scheduling work for fiscal year 1956.

The hourly dispatching of power over the transmission system, control of system interchanges and control of output from Federal generating plants will require some increases in fiscal year 1956. By that time there will be 21 dispatchers and subdispatchers on the Administration's system. Each of these dispatchers requires more than a year of training. In fiscal year 1956, the Administration must again start training for turnover or other replacement needs and, therefore, two new assistant dispatcher positions are required.

Operational requirements for substations have become more precise through the development of a point system for rating substations. For classification purposes and the determination of basic manning requirements, points are assigned to substations on the basis of their importance to the stability and efficiency of the remainder of the electrical network and the importance of loads served directly from the station. Important factors used are as follows:

1. Is the output of a powerplant received into the system through this station?
2. Are interconnections with other members of the power pool made at this station?
3. How much power flows through this station?
4. To what degree is it possible at this station to regulate system and customer voltages?
5. How many lines terminate at this station through automatic switches, and what are the voltages?
6. How many lines terminate at this station through manually operated switches, and what are the voltages?

Seven different classifications of substations are used. Basic manning is the minimum manning, both in number and quality, which must be maintained to take corrective action when trouble or irregularities occur in order that a grade of service comparable to general industry practice may be provided. Basic manning requirements are usually directly related to station classification. One exception is the case where operating duties can be contracted to other agencies having qualified people available in the area. Another exception is the reduction

in basic manning made possible at a given station by providing supervisory control and utilizing manning at some other station where workload permits. Supervisory-controlled stations are designated by adding the symbol (s) to the classification symbol. Standard basic manning requirements are as follows:

Basic manning requirements

	Station classification
1 chief operator, class A (not on shift) 1 senior operator per shift	1
(If workload justifies a second man on any shift, he must be a journeyman.)	
1 chief operator, class A (not on shift) 1 senior operator per shift	2
(If workload justifies a second man on any shift, he may be an apprentice or assistant operator.)	
1 chief operator, class B (works a shift) 1 operator on each of the other shifts	3
1 operator per shift, 2 shifts per day	4
1 operator on 24-hour call each day	5
1 operator on 24-hour call, weekdays only	6
Attended by pool operators as required by workload	7
1 senior operator on 24-hour call each day	3 (s)
1 operator on 24-hour call each day	4 (s)

The amount of manning required to perform the workload at a given station may be more or less than the basic manning requirements. Basic manning can always be used to perform some workload and, in many cases, is capable of performing all operating workload as well as some janitor-caretaker work.

Manning requirements to perform the standard workload at a given substation are determined by considering the unit time and the frequency of routine and irregular tasks. Examples of routine tasks are: inspections of transformers, synchronous condensers, oil circuit breakers, and voltage regulators; reading meters; testing relay circuits, etc. Examples of irregular tasks are: Switching during system trouble, deenergizing circuits for maintenance work, changing transformer taps, etc. When workload is heavier than can be performed by the basic manning, additional manpower is required to adequately safeguard expensive electrical equipment, keep essential records, and operate equipment as necessary.

Results obtained from the point system have been compared with electric utility practice in the Northwest, both public and private, and have been found conservative. The substations on the main grid, where the bulk of operators are used, are not only important to the Federal system but are extremely important to customers served by the other members of the Northwest power pool. Improper or delayed operations at these stations seriously affect the continuity and quality of service over a large area, whereas other utility stations with which the Administration's system compares usually affect service to only a local area. Standards for the Administration's class 1 and class 2 stations usually call for two men per shift. There is only one comparable non-Federal station in the Northwest, and that station employs three men per shift. Standards for class 3 stations usually call for only one operator on each shift. There are numerous non-Federal stations of lesser importance that use two men per shift.

It has not been possible to man stations at standard level for the past several years. For example, in fiscal year 1955, 2 men per shift were provided on only 2 shifts per day in class 1 stations such as Midway and Bell, and only 1 shift per day in class 2 stations including Ross, Covington, and Troutdale. At some class 3 stations such as Redmond and Hot Springs, only 2 shifts per day are covered.

Every effort is being made to reduce basic manning needs by contracting for operating services. Examples are contracts with Washington Water Power Co. for operation of Colfax and Cabinet Gorge substations, with Hanna Nickel Co. for operation of the Hanna substation, and 62 agreements with customers for day-to-day operation of small distribution-type stations. Efforts are also being made to reduce basic meanning requirements through the use of supervisory control. In 1955 fiscal year Eugene, Valhalla, Alcoa, and Walla Walla substations will become supervisory controlled at an annual manpower saving of approximately $20,000 each per year. Early in 1956 fiscal year, the Oregon City substation will be added to this list. The increase for electrical operation will cover the necessary manning required to operate a net increase of 3 substations and the

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higher classification of 5 existing substations. (See tabulations below.) It is planned to provide full coverage at all class 1 stations, 4 of the 12 class 2 stations, and 14 of the 22 class 3 stations. Operation below the proposed manning would cause significant risks to equipment, lowering of grade of service, and in some cases hazards to personnel safety. Many utilities require two men on all switching to check one another.

NEW SUBSTATIONS IN 1956

	Class	Operating cost
Burke	7	$142
Chief Joseph switching station	2	35,350
Columbia Falls	6	474
Hwaco	7	47
Satus	7	332

SUBSTATIONS DISCONTINUED IN 1956

	Class	Saving
Hermiston Butte	7	−$142
Hungry Horse	7	−474

RECLASSIFIED SUBSTATIONS

	1955 class	1956 class	Increased cost
Forest Grove	7	5	$9,276
McNary	3	2 (s)	1,872
New Monmouth	7	6	6,530
Oregon City	3	3 (s)	−16,028
Santiam	3	2	13,968
Tillamook	7	5	9,276

NUMBER OF SUBSTATIONS BY CLASS (AT END OF YEAR)

	1	2	3	4	5	6	7	Total
1955	3	9	24	5	16	7	108	172
1956	3	12	22	5	18	9	106	175
Increase		3	−2		2	2	−2	3

Added personnel for direct supervision are required in 1956 fiscal year. The addition over the 1955 budget is primarily to employ assistants to the three area operations superintendents. These three people will function as general foremen and will be directly responsible for scheduling relief operators in the most efficient manner and for supervising unattended substation inspections. These positions will increase the use of relief operators with a consequent reduction in overtime and will reduce chief operators' travel permitting them to better supervise the activities within their own stations.

Nonelectrical (custodial) activities represent about 80 percent of normal requirements as compared to the 1955 level of about 45 percent of normal. Of the total request, one-third is for janitorial and groundskeeping functions at the J. D. Ross field headquarters where approximately 400 people are headquartered, over 30,000 square feet of office space maintained, and the general area of 164 acres cared for. The remaining two-thirds is for the care of 175 substations ranging in yard area from about one-quarter of an acre to 25 acres. Under this program, 8 man-years will be available for the care of these substations. Efforts are concentrated on weed control in the extensive gravelled areas and on the care of some lawns and shrubs adjacent to control houses. Uncontrolled weeds present a serious fire hazard and result in unfavorable relations with counties engaged in weed-control programs. The appearance of many substations has deteriorated rapidly during the past few years, and has resulted in complaints of neighboring property owners.

The Administration enters into leasing arrangements with power distributors, particularly in remote areas, to use their lower-voltage facilities for transfer of Federal power to the Administration's customers in remote areas. These arrangements permit the use of local transmission lines when they are adequate, and relieve the Administration of excessive maintenance and operating costs. The increased costs in 1956 are due to increases in the amount of Federal energy which will be transmitted over leased non-Federal facilities of the Okanogan Public Utility District and the Columbia Power Cooperative Association.

(b) System maintenance, $3,028,600

In fiscal year 1956 the requirements for maintenance activities total $3,028,600 as compared with $2,723,600 in 1955, an increase of $305,000. The additional requirements result mainly from increases in number of facilities to be maintained in 1956 over 1955 and increased age of equipment.

The Administration's maintenance program is of two parts: (1) a regularly scheduled plan of progressive, preventive maintenance, which has the objective of covering the entire system over a period of years, a portion of the system being maintained each year on a rotation basis, and (2), special and engineering maintenance which cannot specifically be scheduled by location and facility, but for which past experience, on an overall basis, is an accurate guide. Preventive maintenance is insurance, undertaken to avoid expensive breakdowns and to provide continuity of service. The Administration, as an operating utility, is obligated to render continuous electrical service within accepted limits at specified voltages. A breakdown of an electrical facility, which might have been prevented by adequate maintenance, results in (1) the costs of repair or replacement, (2) interruption of service and, as a result, (3) loss of revenue. The possible costs of these three factors must be carefully balanced against the cost of annual maintenance which would prevent such failures. From experience gained in approximately 16 years as an operating utility, from recommendations of manufacturers and from practices developed by other utilities, maintenance standards have been developed by the Administration.

Nearly all segments of the Administration's preventive maintenance program are performed at less frequent intervals than either the recommendations of the manufacturers or as indicated in known data on the practices of other utilities.

Special and emergency maintenance is particularly true of transmission lines where wood poles rot, crossarms check and split, hardware rusts, and steel towers suffer from corrosion. On a comparative basis the Administration's system is relatively young and maintenance related to age has not as yet become a significant item. However, for example, a recent inspection of the St. Johns-Astoria wood-pole transmission lines indicates that pole-top treatment, estimated at $8,000, will be necessary in the near future on this 14-year-old line.

Another item for consideration is the relation of design and construction to a planned maintenance program. The Administration has achieved considerable economies in original cost of facilities by designing a system which will operate satisfactorily under continued heavy loads, which can be restored to service quickly, and which will not break apart during most load swings or other abnormal conditions. To achieve this satisfactory operation, high-speed relays, reclosing circuit breakers, and communication facilities, among other components, must perform as designed. This performance can be brought about only by a maintenance program specifically geared into performance requirements.

A maintenance work-measurement system has been in operation since the beginning of fiscal year 1954. This system includes the establishment of accurate man-hour standards for work performance with a consequent improvement in the reliability of manpower and dollar estimates and planned work programs. Through this sytem, workload is determined by schedules showing the number of units to be maintained based on established performance levels, and costs are budgeted by applying standard man-hour and dollar requirements for each equipment unit to be maintained during the year.

In the opening statement of the operation-and-maintenance program is a general comparative tabulation of components of the system. This may be refined into actual units scheduled to be maintained, as follows:

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Facilities

	Unit years in service [1]		Percent increase
	Fiscal year 1955	Fiscal year 1956	
Transmission lines:			
Structure miles	6,193	6,555	5.8
Access roads, miles	2,782	2,894	4.0
Brush, acres	19,599	20,000	2.0
System communications equipment, unit	895	1,128	26.0
System relays and associated equipment	2,752	2,990	8.6
System metering and associated equipment	2,996	3,233	7.9
	Units in service at beginning of year		
	Fiscal year 1955	Fiscal year 1956	
Substations:			
Number of stations	158	172	8.9
Transformer capacity, forced-cooled kilovolt-ampere:			
230 kilovolts and lower	6,153,000	6,965,000	13.2
230/287 kilovolts		890,000	
Static capacitors capacity, kilovolt-ampere reactive	992,000	1,054,000	6.3
Circuit breakers, each	729	773	6.0
Disconnect switches, each	2,776	2,934	5.7

[1] Number of units times fraction of year in service equals unit year.

These data are a direct indication of the number of units to be maintained and, naturally, are a general index of the cost of such maintenance. This growth, however, is not a full measure of the program as the Administration's system is approaching the stage where age, as distinct from size, will be a significant factor in maintenance costs.

Supervision of system maintenance includes the central staff whose efforts are devoted to the general direction of maintaining the Administration's electrical facilities. No personnel are being added for this work in fiscal year 1956.

Transmission lines maintenance includes transmission-line structures, appurtenant facilities, rights-of-way, airway marking and lighting of special towers, access roads, helicopter patrol, danger tree removal, and brush control. The estimates are a summation of work units based upon established standards. They constitute the major workload for maintenance crews who are stationed at strategic points for system coverage to meet emergency conditions. To round out the full year's work of these crews, force account work will be assigned as required.

The following tabulation shows typical examples of maintenance standards to be applied during the 1956 fiscal year.

Facility:	*Frequency of maintenance or work performance*
Helicopter patrol of system	per year 8
Working patrol of system	do 1
Steel structures	years 15
Wood-pole structures	do 15

Certain deferred tasks are included in the 1956 requirements such as brush control, access-road maintenance, and danger tree removal. Attempts are being made to prolong the life of wood poles by the application of preservatives in the 1956 fiscal year and similarly, because of age of the system, climbing inspections of the older transmission lines will be undertaken. In the 1956 fiscal year, the average number of structure miles of line to be maintained will be 362 miles greater than in fiscal year 1955. Although new, these additional lines will require working patrols, special patrols, and undoubtedly will suffer from lightning damage to insulators and crossarms. While these new lines require little scheduled work,

unscheduled maintenance such as that caused by emergencies or lightning are definitely anticipated.

Additional maintenance of transmission substations and switchyards is programed because of the increases of 1,612,000 kilovolt-amperes of transformer capacity, 62,000 kilovolt-ampere reactive of static capicitors, 44 circuit breakers, and 158 disconnect switches. Obviously, this new equipment will not require the same degree of maintenance as that of older equipment, but gas pressures and oil levels must be checked on oil-filled equipment; oil-insulation levels determined; disconnect switches adjusted, lubricated and cleaned; static capacitors cleaned and checked; and other tasks considered routine but nevertheless necessary to insure satisfactory and economical operation of equipment. Following are maintenance standards.

Facility:		*Frequency of maintenance or work performance*
Oil circuit breakers	years	2
Power transformers, 15,000 kilovolt-amperes and up	do	15–20
Synchronous condensers (hydrogen-cooled)	do	5
Outdoor shunt capacitors	do	3
230-kilovolt disconnect switches	do	2

Meters and relays require added funds for maintenance because of the increase of 237 unit years for metering equipment. This includes such items as revenue meters, printing demand meters, high accuracy metering transformers, multipoint temperature recorders, telemetering transmitters and receivers, recording voltmeters, multipoint temperature indicators, vapor type temperature recorders, switchboard instruments and high voltage potential devices. Standards for meter and relays are as follows:

Facility:		*Frequency of maintenance or work performance*
Revenue meters	year (test)	1
Telemeters	do	1
Switchboard instruments	years (test)	4
Microwave relays	months	6
Carrier relays	do	6
Overcurrent relays	years	2

Relaying equipment will increase by 238 unit years which includes microwave, carrier, distance, overcurrent, differential, pilot wire, voltage, reclosing, potential device relays, annunciator desks, and automatic oscillographs.

Communication facilities will increase in the amount of 233 unit years. This equipment includes new microwave equipment; carrier telephones and supervisory equipment and controls; carrier telemeters; mobile and fixed radios of various frequency types; submultiplexing for relays, supervisory controls and telemetering; fault locators; telephone switchboards, intercommunication sets; emergency power supplies for communication facilities, and microwave terminals. It should be pointed out that although these facilities are classed under "communication equipment," their principal use is not for voice communication but for supervisory control, telemetering, fault location, and relaying. Communication equipment is maintained on an average of 2-month intervals.

Maintenance services include those furnished by the technical laboratory in connection with the maintenance of the system, those related to the buildings of the Administration, and engineering services furnished by the Division of Engineering. The increased requirements for services in this category are brought about by the purchase of spare meter and relay parts for maintenance of associated equipment on the system by the technical laboratory. In addition, the activities of the laboratory must be extended to include services required for the maintenance of added facilities on the system. Increases in building maintenance centers around deferred painting of buildings which have been constructed in recent years and require maintenance. This painting is limited to preventive maintenance on wood buildings which would further deteriorate without the protective cover of paint, and is not being done to enhance the appearance of

these buildings. Engineering services are needed for operational diagrams because of the increased growth of the system. Existing diagrams are no longer correct because of the addition of substations on older lines, and therefore the numbers and names of these lines, or rather portions of these lines, are no longer correct and result in confusion in operation and maintenance of the system. Survey and mapping are required for keeping system engineering data to date. Design services are needed to record alterations and additions to substations.

(c) *Power resources and requirements, $210,000*

This subactivity covers the general direction and performance of power studies, generation planning, steamflow forecasting, and power supply and requirements. In the 1956 fiscal year $3,200 additional funds will be required for a heavier reporting workload.

Supervision includes the work performed by the central staff in administering power studies, streamflow forecasting, and power supply and requirements. No additional personnel are required in the 1956 fiscal year for this purpose.

The power resources work will require a slight increase in fiscal year 1956 to cover the Administration's costs for the interagency operation of hydrometeorologic network forecasting of streamflows, planning of hydraulic generation schedules on a short-range and annual basis, and working with other agencies on installation schedules for additional generation. The power resources program is undergoing substantial revision at the present time. Organizationally the staff is being consolidated with the power schedulers who prepare daily operating plans. A small digital electronic computer is being purchased for use primarily in the preparation of short-range generation schedules. The purchase of the computer and the reorganization will permit the increased workload resulting from the installation of 807,000 kilowatts of additional generating capacity on the Federal system to be handled by the present number of employees. Thus substantial staffing reductions from comparable levels in fiscal year 1955, and the increased speed and variety of analyses made possible with the new computer will permit a greater economy of hydraulic operation and increased Federal revenues.

The power resources work is one of the most fertile areas for increasing the revenues of the Federal Government. Careful attention to this work results in making more power available to the region through more economical use of water and closer cooperation with other utilities. The Administration has therefore placed a high priority on this work program and has sought to maintain its performance level.

The power partnership program has not required additional work on generation schedule planning as yet. Increased emphasis on development of Canadian storage is apparent and will require considerable work. This will be handled by the present staff.

Power requirements work is below the 1955 fiscal year level of $78,600. This activity consists of field and central office work required to prepare load estimates for operating programs and to plan the most economical system facility additions.

In fiscal year 1956 it is proposed to continue the present program under which the customer-utilities prepare their own load estimates with only limited guidance and coordination furnished by the Administration's field staff.

This represents the very minimum basis upon which the Administration can obtain reliable and useful load estimates. There has been a variable response from the utilities to this approach although, with the passage of time, the program is gaining momentum.

The power requirements program has been greatly reduced in recent years. It is now a minimum program which provides only the economic data and load estimates which are needed to prepare operating plans and schedules, to determine the need for electrical facility additions to the system and to plan them in the most economical manner in full contemplation of system loads and power flows. Reduction has been possible by the customer utilities assuming more of the load estimating work and elimination of industrial marketing studies. It is anticipated that 40 new load estimates will be needed in fiscal year 1956 along with a general review of each utility's load growth, and that approximately 50 load studies and reports will be required for transmission system, river regulation, revenue and payout studies.

(d) *General services and supervision, $438,900*

This subactivity includes the general engineering direction and supervision of operational plans both in the central office and in the area; system engineering,

planning and studies; technical analyses and developments; and maintenance of the system analyzer board; as well as general services such as material control and scheduling, safety operations and funds to cover Federal employees group life insurance and Federal insurance contributions. An increase of $33,800 is required because of the work associated with increased growth in the system as well as the loads being served.

Supervision includes the engineering direction both in the central office and in the field essential to the development of basic engineering plans and standards required for system operation and maintenance. The increase in this task largely occurs in the field where added engineering talent is being used in the solution of operational problems. No additional personnel are being employed for this work, however, and the increase is attributable to full employment of all positions involved during the 1956 fiscal year which were lapsed in the preceding year.

The development of these engineering plans are those relative to the Administration's transmission facilities and integration of these facilities with the region's generating plants and load centers to meet operational needs to satisfactorily serve customers. Specifically, these activities include fault studies of either a special or systemwide nature, switchgear operating studies and recommendations, studies with other agencies on problems of mutual concern involving items such as electrical characteristics of generating and associated equipment, and other studies of operational nature. All of these studies are made with a single objective to determine practices and operating standards which will provide a maximum of system reliability and stability within reasonable engineering economic limits.

Work associated with these activities in the past has led to such significant engineering improvements as the following, to name a few:

1. Elimination of ground wires.
2. Use of lower basic insulation levels for 345 kilovolts.
3. Use of 345-kilovolt autotransformers in transmission lines.
4. Use of series capacitors.
5. Use of supervisory control where practical.

These improvements have been incorporated in the design and operation of the system with resulting savings running into millions of dollars.

Studies are being made continuously to improve the system and lower the costs. One study which is in progress and appears very promising is the elimination of many 230-kilovolt lightning arrester installations without reduction of safety of transformer installations.

Requirements for general services in the 1956 fiscal year are essentially the same as in the 1955 fiscal year. These services include requisitioning, purchasing, and control of materials required for system operation and maintenance. Safety operations remain at essentially the same level with the only increase being that required by administrative increases in salaries of presently employed personnel.

The Government's portion of the cost of Federal employees group life insurance and Federal insurance contributions are also included in this category of general services insofar as they apply to operation and maintenance of the system.

2. Power contracts and rates

Subactivity	Adjusted appropriation	Decreases	Subtotal	Estimate, 1956	Increases	Page reference, table justification
(a) Supervision	$41,500	----------	$41,500	$45,700	$4,200	BP117.
(b) Negotiation of contracts	76,500	----------	76,500	77,200	700	BP117.
(c) Billing and servicing contracts	62,200	----------	62,200	65,600	3,400	BP117.
(d) Rates and revenues	71,300	$31,800	39,500	39,500	----------	BP117.
(e) General services	1,000	----------	1,000	1,000	----------	BP118.
Total	252,500	31,800	220,700	229,000	8,300	

NOTE.—This activity includes the negotiation of power sales contracts, computation of power bills, and establishment of Federal rate schedules.

(a) Supervision, $45,700

This subactivity involves the general direction of both the central staff and field organization engaged in the development of plans for service to customers, the preparation and negotiation of power contracts, computation of power bills, and preparation of required statistical data such as that furnished the Federal Power Commission. In the 1956 fiscal year $4,200 additional funds are required

because of increased activity in this field. No additional personnel are being employed for this purpose and the increase is devoted in part to full years employment personnel as well as a slight increase in travel requirements.

(*b*) *Negotiation of contracts, $77,200*

This subactivity includes the planning for electrical facilities to serve the Administration's customers and the negotiation and drafting of power sales contracts, exchange agreements, transfer or transmission agreements and storage agreements, and requires an increase of $700 over 1955 to cover this work. It is expected that approximately 105 service plans must be developed and 30 joint customer studies prepared along with 68 use-of-facility studies and 84 loss-factor computations during fiscal year 1956. In addition, it is estimated that 170 power contracts will be worked upon or completed, of which 127 will require work in the field. During the present period of program adjustment, many difficult contract problems must be handled in addition to the contracting of certain parts of the 807,000 kilowatts of power to be placed on the system in fiscal year 1956.

(*c*) *Billing and servicing contracts, $65,600*

This subactivity covers computation of wholesale power bills and preparation of official statistical reports on generation and sales for internal use and for reports required by the Federal Power Commission and other Federal organizations. This work is carried on both centrally and in the field, requiring $3,400 additional funds in the budget year. No additional personnel are being employed for this purpose, the increase being attributable to administrative increases and full-time employment during the year of the people engaged in this work. Power billings during the 1956 fiscal year are expected to increase by $8,600,000 and the number of points of delivery which requires individual computations for billing will be increased by 8.

(*d*) *Rates and revenues, $39,500*

This subactivity covers the work of the central staff in connection with rate studies and sales statistics. A special wholesale rate study to be initiated by a consulting firm during 1955 will not recur in 1956 resulting in a deduction of $31,800 in arriving at the subtotal for the 1956 estimate. Following this study the central staff will prepare for adjusted rate levels and possibly complete such new wholesale rate schedules as are required. No additional funds are requested in the 1956 fiscal year.

(*e*) *General services, $1,000*

The above amount is to cover Federal employees group life-insurance payments for persons engaged in the power contracts and rates activity.

3. General administration

Subactivity	Adjusted appropriation	Decreases	Subtotal	Estimate, 1956	Increases	Page reference, table justification
(*a*) Administration	$151,800	----------	$151,800	$152,900	$1,100	BP118.
(*b*) Personnel	51,100	----------	51,100	53,100	2,000	BP118.
(*c*) Administrative services	169,900	$7,000	162,900	168,700	5,800	BP118.
(*d*) Fiscal services	159,800	----------	159,800	166,900	7,100	BP118.
(*e*) Budget	30,600	----------	30,600	32,800	2,200	BP118.
(*f*) General services	30,800	1,800	29,000	30,600	1,600	BP118.
Total	594,000	8,800	585,200	605,000	19,800	

This activity consists of the general management staff and the fiscal, administrative, and general services required for the operation and maintenance program of the Bonneville Power Administration. Approximately one-fourth of the total estimate for this activity is for the cost of general executive direction including the Washington, D. C. liaison office. The remainder is needed for facilitating services, fiscal services and similar housekeeping functions which are in a large part dependent upon the size of the system operation and maintenance activities of the Administration.

General administration activities were reduced during 1955 as a result of reorganization of functions in these activities and a reduction or an elimination of programs contained in these activities in accordance with policies of the Depart-

ment of the Interior. Deductions of $8,800 resulting from these changes and from nonrecurring amounts provided in 1955 for the move into the new Interior office building have been taken in arriving at the subtotal for the 1956 estimates.

In 1956, $605,000 will be required for general administration activities, an increase of $19,800. Staffing for these activities in 1956 will be held to the 1955 level. However, because this staff will devote a higher proportion of time to operation and maintenance and less to construction, a greater charge will fall to the operation and maintenance appropriation. The increase of $19,800 is needed to cover these charges.

MAINTENANCE OF NEW FACILITIES

Chairman HAYDEN. Of the increase, how much is for the purpose of operating and maintaining new facilities that have been added during the past year?

Mr. PEARL. You want us to supply that for the record, is that it?

Chairman HAYDEN. Yes.

Mr. PEARL. I can tell you that approximately it is all for that. In other words, we expect to operate on about the same basis for contracts and for general administration during the next year, so practically all of this increase is for actual operation and maintenance of these facilities that have been added.

Chairman HAYDEN. You have something new to handle and you have to have somebody to handle it.

Mr. PEARL. That is right.

Chairman HAYDEN. And to make a profit doing it?

Mr. PEARL. That is right.

Chairman HAYDEN. On this increase for operating and maintenance, what new facilities have been added to the Bonneville system?

Mr. PEARL. Yesterday, one of your group asked us to put in the record this chart that shows the number of miles increase of line, the number of substations, the amounts of power we are carrying and, in other words, a complete itemized list of our increased physical capacities.

Chairman HAYDEN. That will be in the record.

Mr. PEARL. Yes. It was inserted yesterday.

INTERCONNECTION WITH IDAHO POWER CO.

Senator MAGNUSON. I wanted to ask: Is that interconnection at La Grande with the Idaho Power Co. in the bill?

Mr. PEARL. The Idaho Power Co. is putting in the line and it will be necessary for us to put in the switching gear at La Grande, and that is in.

Senator MAGNUSON. I wanted to place in the record here the substance of a letter from the Public Utility Districts where they do not oppose the item but they are curious to know why you have always opposed it before.

Mr. PEARL. That was before my time, because it has not been opposed since I have been there.

Senator MAGNUSON. Because you recommend it now the Idaho Power Co. is going to get it. We have attempted to get it in before on other occasions and it has always been opposed.

Mr. PEARL. That is something we would have to go back into history for, to get an answer. Maybe one of the men here is familiar with this past history to which you are referring.

Senator MAGNUSON. We tried to build that Federal line from La Grande to Baker for a long time and it seems ironical that now because the Idaho Power Co. is going to get it, it is all right.

Mr. PEARL. That is something that I did not know.

Chairman HAYDEN. Is there anybody here who is familiar with the past history?

Mr. OSTRANDER. I think our engineers know more about the details than I do, but I do know that we have worked with the Federal Power Commission in the past.

A study has been made of that and the Federal Power Commission has been in favor of it.

It is my recollection, sir, that we were in favor of making a tie with Idaho at the south where we are now making it in order to bolster the capacity of the system to bring in power from Idaho and Utah.

Chairman HAYDEN. Was this matter passed upon by the Federal Power Commission?

Mr. OSTRANDER. The Federal Power Commission, San Francisco office, made a technical study in cooperation with us.

I think our engineers can give you the story on it.

Chairman HAYDEN. Who knows about that?

Mr. STARR. I can tell you that we have studied the matter from the standpoint of the engineering aspects and some time ago and in a duplicate study made recently, arrived at the conclusion that a 230 kilovolt circuit between Baker and La Grande, without continuing the 230 kilovolt circuit on into southern Idaho, would increase the net potential delivery to the Idaho area of some 108,000 kilowatts.

INTERCHANGE OF DUMP POWER

Senator MAGNUSON. It does not mean a single ounce of energy for any preferred customer, does it? It is merely interchange of dump power, is it not?

Mr. PEARL. I think your statement is accurate. It is just a market for some dump power. It is an exchange of power.

Senator MAGNUSON. It will mean some savings for the Idaho Power Co.?

Mr. PEARL. It will supply them with power.

Senator MAGNUSON. And some additional revenue for us?

Mr. PEARL. Yes, it will mean additional revenue for us.

Senator MAGNUSON. The point that I want to make is that we tried for a long time to have Bonneville build this itself where you would have some additions to the preferred customers, but that was always opposed.

Now the Idaho Power Co. is going to build it and I guess it is going to work both ways, but it is a considerable saving for them and I think that the record ought to show that.

Mr. CALLARD. Senator, last year the Snake River was below all records for low water and it scared everybody.

They could not get enough power from Utah and the customers of Idaho practically had a brownout during the period of that low water. That is the thing that brought this matter to an issue and they came over and asked us if we would make this interchange, and we said "Yes," as long as it is strictly on a dump power basis, because we have no firm power to export to Idaho.

We were worried about taking care of Oregon and Washington, and wished to avoid getting people in Oregon and Washington feeling like their power was going out of an area that was facing a future shortage. But as long as we operate on a dump basis, where we give them power if we have it, and if we do not have it, they do not get it, and vice versa, it is a very valuable thing. It is a very valuable thing to the Bonneville system because in that exchange account, and this is purely an exchange agreement, we can hold some of those kilowatts there and if we have a situation like we had in March and Idaho did have some extra power, we could have asked for a delivery of power to us.

That is the reason for this particular interchange on an entirely different basis than it was some years ago when the idea of building our line over in Idaho was apparently before this committee.

Chairman HAYDEN. Was that based upon the assumption that there was plenty of power in the Bonneville system, so much power that it could be exported to Idaho?

Mr. CALLARD. In May, June, July, and August, we have water running out of our ears and that is the time when the Snake River is down. In this intertie, by the way, you will be interested to know that the Idaho Power Co. is on the bottom of the totem pole. Right in their contract it is stated.

Senator MAGNUSON. It never was on the totem pole at all. It just got on there.

Mr. CALLARD. We had to put them on the bottom.

Senator MAGNUSON. I imagine they ought to start at the bottom.

Mr. CALLARD. I want to point out that the interruptible aluminum customers are protected.

Senator MAGNUSON. Are they protected?

Mr. CALLARD. Yes, sir; by the terms of the contract with the Idaho Power Co.

SCHEDULE OF PRIORITY

Senator MAGNUSON. What do you have to say about this:

> The contract entered into between Bonneville Power and the Idaho Power Co. would establish a schedule of allocation or priority which has now been established by the means of this contract on the secondary power of the whole Columbia River system.

Would that be a correct statement?

Mr. CALLARD. Yes, sir; they have a position.

Senator MAGNUSON. You have established a new pattern for secondary power, have you not, by this contract? Is that correct?

Mr. CALLARD. Yes, sir.

Senator MAGNUSON. I do not care whether he is low or high on the totem pole. He is on the totem pole now.

Mr. CALLARD. Exactly.

Senator MAGNUSON. And is this not a change of policy also by the Department:

> whereby there will be no longer a requirement that private lines built across public land must be made available to the Government for at least a degree of excess capacity which is unused by the private power owner for purposes of transmitting Government power to other potential customers.

That policy is changed by this, too, is it not?

Mr. CALLARD. No, sir.

Senator MAGNUSON. It is not?

Mr. CALLARD. I am not familiar with that other provision. I do know that it has been in the regulations for years. These people already have a line from Baker to LaGrande. This is merely a higher voltage line.

Senator MAGNUSON. But this does for the first time introduce Columbia River Federal power into the Idaho area.

Mr. CALLARD. We have had an intertie indirectly through Montana for years.

Senator MAGNUSON. Mr. Chairman, the contract is a relatively small thing in itself relating to number of kilowatts, but it changes the whole policy.

RELATION WITH MONTANA INTERTIE

Chairman HAYDEN. What is the relation between this intertie and the Montana intertie?

Mr. CALLARD. We have a firm contract with Montana where they have 50,000 kilowatts on a firm contract so that they have a very high place on this totem pole. They also take some dump energy from us.

Senator MAGNUSON. It does have, I suppose, a potential benefit that if we got too short and they were full down below in Utah and Idaho we might be able to get some of their power?

Mr. CALLARD. Very definitely.

Mr. PEARL. That is in the contract.

Senator MAGNUSON. That is a potential and a possibility, but our water history does not seem to bear out that that would ever happen.

Mr. CALLARD. There are certain times of the year when they have water when we are a bit short.

Chairman HAYDEN. You might put that definitely in the record so that we can have the facts.

FLOW RECORDS OF COLUMBIA AND SNAKE RIVERS

What I am getting at is that there must be a record of annual and monthly flow of both rivers and if its true that in certain months in the year on the average there is less water on the Columbia and more in the Snake River system, and vice versa, you can get those flow records, and I think it might be helpful.

(The information referred to follows:)

The mutual advantages to the Government and to the Idaho Power Co. from the Idaho intertie result largely from the diversities which exist between the Columbia River generating plants and the Snake River plants. These diversities are of three types: (1) diversities between average flows on the two rivers; (2) diversities between critical flows and high runoff periods; and (3) load diversities.

The following tables show how significant is the diversity between average flows:

Comparative summer flows, Columbia and Snake Rivers

	Average percent of total annual runoff	
	Columbia River [1]	Snake River [2]
June	23.4	12.6
July	15.0	5.2
August	9.1	4.5
Total, summer months	47.5	22.3

[1] At Grand Coulee.
[2] At Oxbow.

Comparative flows during critical season at United States Columbia River power system, Columbia and Snake Rivers

	Average percent of total annual runoff	
	Columbia River [1]	Snake River [2]
October	4.0	6.7
November	3.5	6.8
December	3.0	7.6
January	2.6	7.4
February	2.4	7.5
March	3.5	10.2
	19.0	46.2

[1] At Grand Coulee.
[2] At Oxbow.

It will be noted from the first table that in the summer months, on the average, the Columbia River experiences 47.5 percent of its total annual runoff. This occurs when loads on the Bonneville system are lowest, with the result that the Government can generate very considerable amounts of power for which it has no market. On the other hand, only 22.3 percent of the average total annual runoff of the Snake occurs in this period, when the loads of the Idaho Power Co. system are highest due to irrigation pumping requirements. Thus the Government in the summer can interchange power with the company to mutual advantage.

The second table illustrates why the exchange is also advantageous in the critical months on the Government's system During these months average flows on the Columbia amount to only 19 percent of total annual runoff, while on the Snake flows amount to 46.2 percent of annual runoff. This situation puts the Idaho Power Co. in a favorable position to exchange power with the west group pool utilities in the winter when Columbia River flows are down and west group pool loads are at a maximum figure.

In addition to the average flow and load diversities mentioned above, streamflow records show that a critical water year on the Columbia is not associated with the most critical water year on the Snake. The critical low runoff years on the Snake are 1929–32 and 1934–35 while on the Columbia as a whole the critical year is 1936–37. Further the high runoff on the Snake normally occurs ahead of that of the Columbia so that while the Columbia River flows are experiencing a reduction in head due to high flows, the Snake River plants are free of this restriction.

The intertie and Idaho Power Co.'s new line will provide additional power exchange capacity between the eastern and western groups of the Northwest power pool membership by completing the second tie of the transmission loop; facilitate the delivery of steam power generated in Utah to areas of Oregon and Washington where it may be needed; and to make provision for emergency and breakdown relief. Neither Bonneville nor Idaho Power will be entitled, by the terms of the agreement, to receive power from the other except at the option of the supplier. While the exchange agreement runs for 20 years, it can be can-

celed by either party after August 1960 by giving written notice of such termination to the other party 3 years before such termination.

The Federal Power Commission has thoroughly studied the value of this intertie and its benefit to all power users in the Northwest as covered in FPC report P–28, dated November 1954. The income to Bonneville through the sale of additional summer dump that is otherwise unmarketable will run from $400,000 to $600,000 per year.

ACCESS TO UTAH STEAM

Mr. CALLARD. The other one item, Senator, is that it gives us an access on the Bonneville system to Utah steam which is low-cost steam and we have an intertie so that later on if we have some power shortages and our interruptible customers want to get some lower priced steam, this gives an avenue of getting that steam.

Senator MAGNUSON. How much of that is available?

Mr. CALLARD. Just whatever is available.

Senator MAGNUSON. How much?

Mr. CALLARD. They have about 200,000 kilowatt of steam, I believe, in Salt Lake.

Senator MAGNUSON. How much do they use of it? They use it all, do they not?

Mr. CALLARD. Again, it ties in with river flows on the Bear River and the whole thing.

Senator MAGNUSON. Would you say that we would have some fear because the 20-year contracts already tie us quite effectively to give power to new industries. Now we are making a pattern for our secondary power.

EFFECT OF POOLING ON NEW INDUSTRY

Would you say that this new pooling would aid or hurt a new industry coming into the Columbia Federal Power area in getting power?

Mr. CALLARD. I do not believe that it would aid them because we are not getting a firm contract for power. It is purely a typical exchange agreement.

Senator MAGNUSON. Your best opinion is that this would not aid that situation at all which I contend is now very effectively tied up by the 20-year contract?

Mr. CALLARD. It would protect any future contracts.

Senator MAGNUSON. But it does not aid us for new industry whatsoever?

Mr. CALLARD. No, sir.

Senator MAGNUSON. And it could hurt us.

Mr. CALLARD. No, sir.

Senator MAGNUSON. You do not think it could?

Mr. CALLARD. Because we have control over whether or not we let them have the power.

Senator MAGNUSON. Do you have complete control under the contract?

POWER LOAN PROVISION

Mr. CALLARD. Except for one reservation of loaning them some power. There is one reservation that is different in this wheeling contract. Their shortage of Idaho power can lap over into our storage

season and we have agreed to give them 100,000 kilowatt-hours in September if they need it and they have to pay it back to us the first of October if we need it, and they may have to buy steam in order to do it.

Senator MAGNUSON. That is in the contract?

Mr. CALLARD. That is in the contract.

Senator MAGNUSON. Thank you.

Chairman HAYDEN. Have you any questions, Senator Dworshak?

Senator DWORSHAK. I recall that we discussed this yesterday, Mr. Chairman, and I regret that I necessarily had to attend a meeting of the Interior Committee this morning on some legislation.

I have no questions.

Chairman HAYDEN. We thank you for your attendance.

PERSONNEL TURNOVER

Senator MAGNUSON. Can I ask one question before they go?

This may not necessarily have too much to do with your appropriation, but indirectly, what sort of turnover have you had of personnel percentagewise since you have been in there? Has it been larger than usual?

Mr. PEARL. No, eliminating our reduction in staff, it has been very small. We did have a reduction in staff last year.

Senator MAGNUSON. How many people were reduced?

Mr. PEARL. The reduction was roughly 600 people.

Senator MAGNUSON. You have let 600 people go?

Mr. PEARL. That is right.

Senator MAGNUSON. Then you have remaining how many?

Mr. PEARL. 2,110.

Senator MAGNUSON. In the 2,110, you say the turnover has been no more than normal?

Mr. PEARL. It has been small.

Senator MAGNUSON. Normal.

Mr. PEARL. Yes.

Senator MAGNUSON. As I understand it, the reason that you could make this reduction was the fact that we had discontinued construction.

Mr. PEARL. That is right, we were given a limited amount of funds.

Senator MAGNUSON. The reason you could reduce 600 is that we discontinued construction.

Mr. PEARL. We contracted construction rather than doing it ourselves. That is the answer.

Senator MAGNUSON. Then there was a big drop in what the budget asked for construction.

Mr. PEARL. Yes, that is right.

Senator MAGNUSON. So that the curtailment of the activity of Bonneville is responsible for the curtailment of the employment in the amount of 600?

Mr. PEARL. Yes, sir.

Senator DWORSHAK. How many employees do you have at the present time?

Mr. PEARL. 2,100.

Senator MAGNUSON. That is all.

Chairman HAYDEN. Thank you, gentlemen.

SOUTHEASTERN POWER ADMINISTRATION

STATEMENTS OF FRED G. AANDAHL, ASSISTANT SECRETARY FOR WATER AND POWER, DEPARTMENT OF THE INTERIOR; CHARLES W. LEAVY, ADMINISTRATOR; DAVID W. BUSH, ASSISTANT TO THE ADMINISTRATOR, SOUTHEASTERN POWER ADMINISTRATION

GENERAL STATEMENT

Chairman HAYDEN. Mr. Leavy, we will be pleased to hear from you.

Mr. LEAVY. Mr. Chairman, I have a very short statement. If you wish, I will read it, and I think that will raise the matter for questions.

OPERATION AND MAINTENANCE

The fiscal year 1956 budget estimate for the Southeastern Power Administration consists entirely of "Operation and maintenance" funds in the amount of $1,160,000. No "Construction" funds are included. The estimate provides for four activities as follows: (1) System operation and maintenance, $73,000; (2) purchase of energy and wheeling charges, $925,000; (3) power contracts and rates, $86,000; and (4) general administration, $76,000.

FIRMING ENERGY AND WHEELING FEES

Funds for the second activity are included in the estimate exclusively for purchases of firming energy and payment of wheeling fees under the Government's existing contract with the Virginia Electric & Power Co., through which Kerr project power is purchased from the Government by 17 rural electric cooperatives located in Virginia and North Carolina. Pursuant to the wishes expressed last year by both the House and Senate committees, the amount of the appropriation request for this activity is not based on critical water year conditions at the project. In computing the amount of the estimate for fiscal year 1956, a determination was made of the actual payments that would have occurred under the Virginia Electric & Power Co. contract had the contract been in operation and serving the estimated 1956 requirements of the 17 cooperatives during the 39 years for which actual water records are available. The amount of the appropriation request is the average of these yearly determinations.

Minor changes only have occurred in the detailed justifications which were furnished the committee in January with the budget estimate.

STATUS OF GENERATING CAPACITY

The status of generating capacity remains as set forth in the justification. For convenience you may wish to examine the table which is attached to your copies of this statement. You will note that there are 7 projects now operating, and that capacity installations have been completed at all 7. More than 1,030,000 kilowatts of capacity are installed. In the budget year, the first unit at the Old Hickory project will be installed, so that the total of installed capacity at the end of that year will exceed 1,050,000 kilowatts. Thereafter, in the 2 years following the budget year, further installations at Old Hickory,

together with installations at 3 other projects now under construction, will increase the capacity total to more than 1,200,000 kilowatts.

The output of the capacity now operating at the projects continues to be sold under 22 long-term contracts as stated in the justifications, but the short-term interim agreements for power disposal have decreased from 3 to 2. The entire output of the capacity now being sold to the Tennessee Valley Authority under a long-term contract; the Georgia Power Co. is purchasing the entire output of the Allatoona project under a long-term contract.

GEORGIA POWER CONTRACT

Chairman HAYDEN. How long is that contract to run?

Mr. LEAVY. The Georgia Power Co. contract, I believe, is a 10-year contract cancellable on 3 years' notice by either party.

The Appalachian Electric Power Co. is purchasing the entire output of the Philpott project under a short-term agreement; under a long-term wheeling and firming contract with the Virginia Electric & Power Co. part of the output of the capacity now operating at the John H. Kerr project is being sold to the company and the other part is being sold under long-term contracts to 17 rural electric cooperatives of Virginia and North Carolina; part of the output of the capacity now operating at the Clark Hill project is being sold to the South Carolina Public Service Authority and the Greenwood County Electric Power Commission under long-term contracts, and the remainder of the output is being sold to the South Carolina Electric & Gas Co. under a short-term agreement.

The estimate of 1956 revenues of approximately $14 million remains as presented in the justification. Total revenue for 1955 estimated at approximately $11 million in the justification will be somewhat reduced based on earnings so far experienced for the year. There will be partially offsetting variations from the amounts estimated for the individual projects and the total will be between $10 million and $10,500,000 depending on water conditions for the last part of the year.

The several current year circumstances having a bearing on the objectives adopted for fiscal year 1956 remain substantially as described in the justifications, and the agency's budget year objectives continue to be as enumerated. The objectives are:

First, administration of at least 98 and possibly as many as 148 long-term operational and power disposal contracts;

Second, establishment of rates for the Old Hickory, Jim Woodruff, Buford, and Cheatham projects, and maintenance of repayment accounts for the Wolf Creek, Center Hill, Dale Hollow, Allatoona, Philpott, John H. Kerr, and Clark Hill projects;

Third, disposal of Old Hickory and Cheatham power to the Tennessee Valley Authority;

Fourth, negotiation of long-term arrangements for Jim Woodruff and Buford power disposal; and

Fifth, determination of the benefits available from integrated operation of the Buford, Allatoona, Clark Hill, Jim Woodruff, and Hartwell projects, and definition of electrical means required to secure integrated operation.

UNIVERSITY OF MICHIGAN LIBRARIES

The budget year objectives represent a substantial increase in work over the current year. No corresponding increase is requested in funds for the direct operation and maintenance of the agency headquarters. Rather, the $235,000 requested for this purpose provides for a continuation of the agency's working force at the current-year level.

Chairman HAYDEN. Is this the table that you referred to which we can put in the record?

Mr. LEAVY. Yes, sir.

Chairman HAYDEN. For the current fiscal year the "adjusted appropriation" for "Operation and maintenance" was $1,211,800. The budget estimate for fiscal year 1956 is $1,160,000—a decrease of $51,800.

JUSTIFICATION

The justifications will be made a part of the record.

(The document referred to follows:)

Operation and maintenance

Appropriation act, 1955	$1,228,000
Supplemental Appropriation Act, 1955	----------
Total appropriation	1,228,000
Transfer to "Salaries and expenses, Office of the Solicitor, Interior"	−16,200
Adjusted appropriation	1,211,800
Budget estimate, 1956	1,160,000

Analysis of activities

	Adjusted appropriation	Estimate, 1956
1. System operation and maintenance	$72,500	$73,000
2. Purchase of energy and wheeling charges	978,000	925,000
3. Power contracts and rates	84,400	86,000
4. General administration	76,900	76,000
Total	1,211,800	1,160,000

Operation and Maintenance

STATUTORY AUTHORITY AND AGENCY RESPONSIBILITIES

Section 5 of the Flood Control Act of 1944 makes the Secretary of the Interior responsible for marketing the power and energy generated at all reservoir projects under control of the Corps of Engineers, Department of the Army. In March of 1950 the Secretary established the Southeastern Power Administration to carry out this responsibility in a 10-State area consisting of West Virginia, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, and Kentucky.

January 1955, status of generating capacity and marketing arrangements

	Kilowatts operating at January of current year	Kilowatts under construction for operation in—				Total
		Current year	Budget year	Fiscal year 1957	Fiscal year 1958	
Wolf Creek	270,000					270,000
Center Hill	135,000					135,000
Dale Hollow	54,600					54,600
Allatoona	74,000					74,000
Philpott	14,000					14,000
John H. Kerr	204,000					204,000
Clark Hill	280,000					280,000
Jim Woodruff				30,000		30,000
Old Hickory			25,000	75,000		100,000
Cheatham					36,000	36,000
Buford				86,000		86,000
Total	1,031,600		25,000	191,000	36,000	1,283,600

The power now generated at the projects is being sold under 22 long-term contracts and 3 short-term, interim agreements. The entire output of the Wolf Creek, Center Hill, and Dale Hollow projects is being sold to the Tennessee Valley Authority under a long-term contract. The Georgia Power Co. is purchasing the entire output of the Allatoona project under a long-term contract. The Appalachian Electric Power Co. is purchasing the entire output of the Philpott project under a short-term, interim agreement. The output of the John H. Kerr project is being sold in three ways: one part is being sold to the Virginia Electric & Power Co. under a short-term interim arrangement, another part is being sold to the company under a long-term wheeling, firming and sale-of-power contract, and another part is being sold under long-term contracts to 17 rural electric cooperatives of Virginia and North Carolina. Part of the output of the Clark Hill project is being sold to the South Carolina Public Service Authority and the Greenwood County Electric Power Commission under long-term contracts, and the remainder of the output is being sold month by month on the basis of the best price obtainable among the several agencies interconnected with the project.

FUNDS REQUIRED FOR APPROPRIATION

The agency's appropriation request consists entirely of operation and maintenance funds in the amount of $1,160,000. The funds are distributed among four activities required for achievement of the budget year objectives. The activities are system operation and maintenance, purchase of energy and wheeling charges, power contracts and rates, and general administration. Purchase of energy and wheeling charges is estimated to require $925,000. The remaining $235,000 is required for actual operation of the agency.

Budget year objectives represent a substantial increase in work over the current year. No corresponding increase, however, is requested in funds for the agency. The $235,000 requested for this purpose provides for a continuation of the agency's working force at the current year level.

STATUS OF REVENUES

Last year's actual revenues and the revenues which are estimated for the current year and the budget year are as follows:

Projects	Fiscal year 1954, actual	Fiscal year 1955, estimated	Fiscal year 1956, estimated
Wolf Creek, Center Hill, and Dale Hollow	$1,523,300.00	$3,686,000	$4,300,000
Old Hickory			160,000
Allatoona	924,128.50	943,000	1,100,000
Philpott	166,504.25	227,000	244,800
John H. Kerr	2,697,171.58	3,179,000	4,171,241
Clark Hill	2,619,918.89	2,955,000	4,312,420
Total	7,931,023.22	10,990,000	14,288,461

System operation and maintenance, $73,000

The activity is carried out to provide for investigation of the power market; determination of alternative transmission costs; scheduling and dispatch of power generation; scheduling of storage and release of water; administration of contractual operation requirements; appraisal of proposed hydroelectric developments; and determination of methods for coordinating operation of present and proposed generating plants to obtain maximum utilization of resources.

Constituent tasks of the activity enumerated below are accomplished continuously in every year. Their scope will increase in the budget year as a consequence of operational and power disposal arrangements secured in the current year, and the initiation of integrated operations.

Purchase of energy and wheeling charges, $925,000

Funds appropriated for the activity are used only to pay amounts charged the Government under contractual arrangements for (1) delivery of power over non-Federal systems to load centers of power purchasers for the account of the Government; and (2) purchase by the Government of energy to firm up federally generated power to the load factor required by power purchasers. The fiscal year 1956 appropriation requested for the activity provides solely for such payments under the existing contract with the Virginia Electric & Power Co. It will accomplish service to 17 rural electric cooperatives at 72 points of wholesale delivery located within a 150-mile radius of the John H. Kerr project.

The amount of the appropriation request is not based on critical water year conditions at the project. In arriving at the amount of the estimate for fiscal year 1956, a determination was made of the actual payments that would have occurred under the VEPCO contract had the contract been in operation and serving the estimated 1956 requirements of the 17 cooperatives during the 39 years for which actual water records are available. The amount of the appropriation request is the average of these yearly determinations.

The 17 cooperatives are estimated to require 265,053,500 kilowatt-hours of energy in fiscal year 1956, divided into 179,971,326 kilowatt-hours of on-peak energy and 85,082,174 hours of off-peak energy. It is estimated that 134,605,325 kilowatt-hours of the energy will be wheeled within zone 1 and 130,448,175 kilowatt-hours within zone 2.

Power contracts and rates, $86,000

The activity is conducted to prepare for, accomplish, maintain, and review the results of power disposal arrangements. In its conduct the agency determines the production cost and the selling price of the power; establishes and secures approval of rates; negotiates and administers appropriate contracts; and conducts perpetual review of results.

The tasks making up the activity are continuing in nature. Their number is subject to some variation from year to year according to circumstances, as is the placement of emphasis among them. Both their number and the amount of work entailed in their accomplishment will increase in the budget year.

General administration, $76,000

The activity is conducted to provide executive management for the agency and to supply the agency with supporting administrative services. Its extent from year to year results from and is proportionate to the extent of the agency's other activities. It consists principally of the following tasks:

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1. *Management.*—The agency's program is determined by secretarial criteria. Coordination of the agency's activities and their executive direction and control is secured by staff conference, written directives, and a systematic review of transactions in progress. The effectiveness of procedures methods and routines, is subjected to regular appraisal.

2. *Personnel.*—Actions are taken, records are maintained, and reports are forwarded to accomplish recruitment, separation from the service, job classification, promotion, efficiency rating, retirement, and the like, under procedures required by the Department, the Civil Service Commission and the Congress.

3. *Procurement and office services.*—Materials, equipment, supplies and services, are purchased, records and reference materials are managed, mail is processed and handled, duplicating equipment is operated, motor vehicles and headquarters premises are maintained, staff transportation is secured, switchboard communication is operated, space is managed, and other work of a similar nature is performed to support the operation of the agency.

4. *Fiscal services.*—Accounts are established and maintained to record and control the expenditure of appropriated funds in accordance with the terms of their appropriation. Periodic and special reports on the status of accounts are prepared and forwarded as prescribed by the Department, the General Accounting Office and others.

5. *Budget.*—In each year, program criteria established for the coming year are reflected into an estimate of appropriations required. Departmental review of the estimate is secured, and presentations for justification are made to the Bureau of the Budget and to the Congress in accordance with their respective procedures.

Itemization of estimates

	Estimate, 1955	Estimate, 1956
FUNDS AVAILABLE FOR OBLIGATION		
Appropriation or estimate	$1,211,800	$1,160,000
Obligations incurred	1,211,800	1,160,000
OBLIGATIONS BY OBJECTS		
01 Personal services	214,000	210,000
02 Travel	9,500	11,500
03 Transportation of things		
04 Communication services	4,700	6,000
05 Rents and utility services		
06 Printing and reproduction		
07 Other contractual services	980,000	929,000
08 Supplies and materials	3,500	3,000
09 Equipment	100	500
Obligations incurred	1,211,800	1,160,000

Statement of appropriations by fiscal years

1950	$70,000	1953	$760,000
1951	150,000	1954	1,130,000
1952	216,000	1955	[1] 1,228,000

[1] Includes $16,200 transferred to Office of the Solicitor.

KERR PROJECT POWER

Chairman HAYDEN. With respect to the power generated at the Kerr project, formerly the Buggs Island project, it is stated in the justification that the output of the John H. Kerr project is being sold in three ways: One part to the Virginia Electric Power on a short-term agreement.

Will you explain the terms of this arrangement to the committee?

Mr. LEAVY. To start at the beginning, the VEPCO contract provides for the sale of two-thirds of the output of the project, 60,000 kilowatts of which is wheeled by the company and for which they

sell firming energy. That is sold to the 17 rural electric cooperatives in their service area.

The remaining one-third it has always been assumed would be sold in the service area of Carolina Power & Light Co. There has been no long term agreement or any agreement, as a matter of fact, entered into with that company, so in the interim it has been necessary to sell the remaining one-third to the only available purchaser which is VEPCO.

We had, at the very beginning of this fiscal year, an interim agreement with VEPCO, whereby we sold them the remaining one-third. The energy involved in that was transmitted by them for our account to the cooperatives in lieu of our purchasing firming energy and we were thereby able to realize some savings.

That was a month-to-month contract cancelable on 30 days' notice, and the company gave notice of cancellation which was effective on April 30 of this year.

So, as matters stand, there is no means of selling that remaining one-third except as dump energy under the terms of the long-term VEPCO agreement.

REQUESTS FROM PREFERRED CUSTOMERS

Chairman HAYDEN. Have you had requests from preferred customers for this power?

Mr. LEAVY. Yes; the cooperatives, particularly in eastern North Carolina, have been very much concerned with securing their share of that power.

Chairman HAYDEN. Will the Carolina Power & Light Co. wheel the power to these preferred customers?

Mr. LEAVY. As I understand it their stated position seems to be that they are willing to wheel but they are not willing to sell firming energy to the Government.

I may say that early this calendar year proposals were made by both the company and the cooperatives to the Department setting forth in each case their notion of the way in which the power should be sold. As you can readily understand, those differed very widely. For the past few weeks, we have been working, the Department and Southeastern, on a proposal which will be made within a matter of a few days that in my opinion satisfies the contentions of both parties.

I believe it is a compromise proposal that should be acceptable to both the company and the cooperatives in view of what has been their stated position.

PREFERENCE CLAUSE

Senator MAGNUSON. Do you not have in the law a preference clause?

Mr. LEAVY. Yes, sir.

Senator MAGNUSON. Then why should there be any dispute about it? The law says what you should do.

Mr. LEAVY. The dispute apparently has revolved mostly around the question of whether the company will sell firming energy, which is required by the cooperatives, to the Government for resale to the cooperatives.

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They have indicated as I understand their public statements that they would wheel the Government power and would sell the firming energy directly to the cooperatives.

I believe that if an arrangement could be worked out along that line, it would be satisfactory.

Senator MAGNUSON. This is power that you sell to them, is it not? I am just asking for information.

Mr. LEAVY. The Kerr project is a very low load factor project. It has a lot of capacity but relatively little energy.

In order to make that usable at the co-op load factor, there must be some steam-generated energy.

Senator MAGNUSON. That comes from the company?

Mr. LEAVY. That comes from the company generating facilities. The question seems to be whether the firming energy would, as in the case of the Vepco contract, be sold by the company to the Government who would sell it to the cooperatives along with the project power, or whether the Government would simply sell to the cooperatives the project power and the company would sell to the cooperatives the firming energy.

Senator MAGNUSON. In other words, if this was all Government power minus the firm power from the company, then under the law you would be required to sell it to the cooperatives?

Mr. LEAVY. Well, the cooperatives clearly have a preference to the Government power.

Senator MAGNUSON. The fact that it is a combination of two types of power is the reason for making the contract?

Mr. LEAVY. That is the reason for needing some avenue for firming the capacity.

Senator MAGNUSON. I see.

Chairman HAYDEN. You have two situations which would affect the matter of policy. One is the Georgia Power proposal that they buy all the power and then distribute it to the cooperatives under a contract which they say will make it cheap power to the cooperatives.

The other is this North and South Carolina and Virginia situation where you do a certain amount of wheeling but you do not have firm power enough to supply these preferred customers all of their needs.

Then the difference has to be made up by the local power company.

Now you have the two policies there. Has there been a firm determination in either place as to which way you are going to go?

Mr. LEAVY. Well, the proposal that will be made on C. P. & L., I think is quite consistent with the policy that has been followed in Virginia. It would contemplate a direct customer relationship between the Government and the company.

As you point out, in the Georgia Power situation, what the company has proposed is that the power would be sold entirely to them and they would in turn resell under specified conditions to the preferred agencies.

Senator MAGNUSON. You propose the reverse?

Mr. LEAVY. That is what the Vepco situation is. It is the reverse. I think the proposal on C. P. and L. will be consistent with the Vepco situation. I do not think it can be said that the Georgia situation has been resolved in either direction.

As you may know, a proposal was made by the Department, the so-called tricontract proposal, to which objection was raised by the

cooperatives in Georgia. The cooperatives were concerned primarily with the question of getting title to the power initially.

It is my understanding that Mr. Ancher Nelsen, Administrator of REA, has been working with the cooperatives and the others concerned for the past several months in trying to arrive at some compromise solution that would be acceptable to everyone concerned.

I have not seen the document that has been prepared, but I do understand that there has been a proposal prepared that has been submitted to everyone concerned.

Chairman HAYDEN. Do you know anything about these policy matters, Secretary Aandahl?

Mr. AANDAHL. I have some idea, Mr. Chairman.

Chairman HAYDEN. We have this problem that works out one way in the northern end of this area in Virginia and the Carolinas and then you have the other one down in Georgia.

Are you getting anywhere between these conflicting ideas?

Mr. AANDAHL. I think that we will have a proposal to present for the distribution of one-third of the Kerr power in North Carolina inside of a week. I do not think there is going to be too much difficulty.

The Carolina Power & Light Co. has submitted a proposal. The cooperatives have submitted a proposal which is practically identical to the Vepco contract, although it does have some slight variance from that contract in economic values, but the basic principle is substantially the same.

VEPCO CONTRACT PRINCIPLE

Chairman HAYDEN. The principle in the Vepco contract is that your administration actually does business with a cooperative. It sells them power and they pay for it to you folks and it is wheeled by a private power company and the private power company then supplements that power by either supplying it to the Government or to the cooperatives; is that right?

Mr. AANDAHL. Yes. In the case of the Vepco contract, the power company supplies the Government with the power that is needed to firm up the number of kilowatts that the Government has sold to the cooperative. Then if the cooperative needs additional kilowatts with energy to go with that over and above what the Government has for sale, it can buy that power directly from the power company.

That is the basis of the Vepco arrangement.

Chairman HAYDEN. It seems to be working all right in Virginia as far as I know.

Senator MAGNUSON. Is it not true that the reason the cooperatives want to exchange it is that although they can buy from the power company they do not get the power? That is one of the reasons.

Mr. AANDAHL. No.

Senator MAGNUSON. They do not supply their complete need?

Mr. AANDAHL. The cooperatives are satisfied in general with the Vepco contract. There may be some little question about economic values but the cooperatives are satisfied with the basic policy that is established in the Vepco contract.

Under that contract, the cooperatives buy directly from the Government the number of kilowatts of hydropower that is available

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and what energy the Government has to put in it. The Government buys additional energy to supply those kilowatts at the cooperative's load factor—buys that energy from the company and resells to the cooperatives.

If the cooperatives need still more kilowatts, which many do, and will need more in the future as their loads grow, they will buy those additional kilowatts with the energy directly from the power company and the power company is ready and willing to supply that power as it is needed.

Senator MAGNUSON. If they have the power.

Mr. AANDAHL. They will arrange to have the power because the cooperatives become a customer of theirs to that extent.

Senator MAGNUSON. But overall the complete needs of the cooperatives have not been supplied as of yet. They are asking for more power, are they not, in every case?

Mr. AANDAHL. They are getting all the power they can use.

Senator MAGNUSON. Because of the dual arrangement?

Mr. AANDAHL. Because of the dual arrangement.

Chairman HAYDEN. Do you think the same kind of arrangement can be worked out in North and South Carolina?

Mr. AANDAHL. I think we will have substantially the same arrangement in Carolina. It will be the same to this extent: we are working on a proposal under which the Government will sell the hydro power and energy that comes from the Kerr project direct to the preference customers—the cooperatives—and will pay the Carolina Co. wheeling for that power.

The company is willing to contract with the cooperatives to supply the energy, the additional energy that is needed for firming the Government's hydro.

Chairman HAYDEN. In other words, the difference would be that whereas in the Virginia contract, the Government buys it from the Virginia Power Co. and resells it, in this case it is a direct connection between the power company and the cooperatives.

Mr. AANDAHL. That is correct. That is the proposal. That is the nature of the proposal that we have before us at the present time, and I think that is going to be acceptable.

Chairman HAYDEN. In the Virginia case, anything above what the Government procures or buys they purchase from the company?

Mr. AANDAHL. That is correct.

Chairman HAYDEN. This is a step down whereby the only direct contact they have with the Government is what the Government has to sell and they buy everything else from the company?

Mr. AANDAHL. That is correct.

RATE SCHEDULE

Senator DWORSHAK. Do you have an established rate schedule like Bonneville Power has?

Mr. AANDAHL. There is a rate established for the Kerr project.

Senator DWORSHAK. I mean for all of your activities in the Southeastern Power Administration, do you have an established rate or do you negotiate a separate rate with each customer as you sell the power generated at the Federal plants?

Mr. LEAVY. We have an established rate for each project.

They do vary from project to project.

Senator DWORSHAK. And with different customers?

Mr. LEAVY. As to any particular project, the rate is uniform as to all of the customers.

Senator DWORSHAK. Who established the rate?

Mr. LEAVY. The rate is established by the Department and is subject to the approval of the Federal Power Commission.

Senator DWORSHAK. Have you ever tried to formulate a schedule comparable to the one that Bonneville Power Administration has so that your rate would be the same to all purchasers of power?

Mr. LEAVY. No, we have not, sir. I think it would be somewhat difficult since our projects are not physically tied together and are scattered quite widely.

Chairman HAYDEN. Then the cost of power at one project would vary from the cost at another because of the size of the project.

Mr. LEAVY. That is right, sir. Some of the projects are simply better projects than others for power purposes.

TOTAL DAMS

Chairman HAYDEN. How many dams do you have altogether now?

Mr. LEAVY. There are now seven projects in operation.

Chairman HAYDEN. You expect to have how many when the contemplated dams are completed?

Mr. LEAVY. There are four more presently under construction.

Chairman HAYDEN. Are they large ones, these four that are coming in?

Mr. LEAVY. Not particularly large. Jim Woodruff project is 30,000 kilowatts; Buford project is 86,000; Cheatham 36,000, and Old Hickory is 100,000. That is the largest.

MINIMUM AND MAXIMUM RATE

Senator DWORSHAK. What is the minimum and maximum rate which you charge for your power?

Mr. LEAVY. It is a little difficult to say what is the minimum and what is the maximum since some of the rates are not in comparable terms.

The Kerr project is 90 cents per month per kilowatt for the demand, and four and a half mills per kilowatt-hour for energy. The Clark Hill rate is 75 cents per month per kilowatt for demand and 4 mills per kilowatt-hour for energy

Senator DWORSHAK. That is your wholesale rate?

Mr. LEAVY. That is our wholesale rate.

Senator DWORSHAK. That is the same to private utilities as it is to preferential customers?

Mr. LEAVY. It is the same to all customers.

Chairman HAYDEN. We have discussed the situation in Virginia and North and South Carolina.

What is the arrangement which you have with the Tennessee Valley Authority?

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CONTRACT WITH TVA

Mr. LEAVY. The contract with Tennessee Valley Authority, the present contract, covers the Wolf Creek, Center Hill, and Dale Hollow projects, which are all in the Cumberland Basin.

Under that contract, the entire output of all three of those projects is sold directly to TVA. Their transmission system comes into the area in which the projects are located and it all goes into their system.

They pay for that power on the basis of an annual charge which was set on a basis which presumably would pay out the power cost of the project.

That charge, under the present contract, is $3½ million a year and it can vary from, I believe it is, three-sevenths to eleven-sevenths of that amount, depending on the waterflow. They pay less in low water years and more in high water years.

The rate is designed to pay out the costs of the projects.

We are presently negotiating with the TVA for some increase in that rate.

Chairman HAYDEN. That is what I was going to ask next.

How does that rate compare with their costs of producing power?

Mr. LEAVY. I could not say, sir, how it compares with their costs from their hydro projects. It is, compared with the other projects with which we are concerned, a relatively low cost since those projects were constructed at an earlier date and were not as high-cost projects as some of the others.

TVA STEAM POWER

Chairman HAYDEN. On the other hand, the Tennessee Valley Authority has supplemented its hydro power with steam. When you sell them this power, they have the steam to firm it with.

Mr. LEAVY. That is correct.

Senator MAGNUSON. It goes into the system to supplement their whole system.

Mr. LEAVY. It supplements their whole system.

Chairman HAYDEN. Then the only other remaining area to discuss is Georgia Power.

What is the situation there?

Mr. LEAVY. I believe I outlined briefly what Mr. Nelsen is doing there. I do not know whether you heard what I said, Mr. Aandahl.

Mr. AANDAHL. Yes; I heard most of it.

Chairman HAYDEN. When do you expect to get something done?

We have been talking about the Georgia Power Co. for years, it seems.

Mr. AANDAHL. I think it will be several weeks before there might be an answer to the proposal.

As Mr. Leavy indicated, Ancher Nelsen and his people have been trying to negotiate a modification of the tricontract proposal and that modification is not much more than an arrangement under which the Government will sell the power to the preference customers and the preference customers will immediately turn around and sell it to the Georgia Power Co. under substantially the same conditions that the Government intended to sell it in the first place.

Then the Georgia Power Co. will firm it up and transmit it or exchange it and deliver power to the preference customers at substantially the same rate which was provided in the tricontract proposal.

Chairman HAYDEN. As I remember, there was some contention by the Georgia Power Co. that it was limited by certain State laws concerning REA cooperatives.

Mr. AANDAHL. I am not sure that there is a legal situation there that make our negotiations much different than it is elsewhere.

Chairman HAYDEN. If the State law provided that a rural electric cooperative could only sell to its members then of course it could not sell to Georgia Power Co.

Mr. AANDAHL. That is correct; and that would be a handicap to the present proposal if that position is correct.

Chairman HAYDEN. I heard something of that kind. I do not know whether it is true or not.

Do you have questions?

We thank you, sir.

SOUTHWESTERN POWER ADMINISTRATION

STATEMENTS OF FRED G. AANDAHL, ASSISTANT SECRETARY FOR WATER AND POWER, DEPARTMENT OF THE INTERIOR; DOUGLAS G. WRIGHT, ADMINISTRATOR, SOUTHWESTERN POWER ADMINISTRATION

JUSTIFICATION

Operation and maintenance

Appropriation act, 1955; and second supplemental act 1955	$2,165,000
Transferred to "Salaries and expenses, Office of the Solicitor, Interior, 1955" pursuant to Public Law 465	−61,500
Transferred from "Construction, Southwestern Power Administration" pursuant to Public Law 465	+775,000
Adjusted appropriation	2,878,500
Budget estimate, 1956	1,134,000

Analysis by activities

Activity	Adjusted appropriation	Estimate 1956
1. System operation and maintenance	$540,000	$425,000
2. Purchase of energy and wheeling charges	1,990,000	450,000
3. Power contracts and rates	55,000	55,000
4. General administration	293,500	204,000
Total	2,878,500	1,134,000

General Statement

The estimate of $1,134,000 for the operation and maintenance program of the Administration for the fiscal year 1956 is based on operating and maintaining the transmission system constructed by the Administration and includes an estimate of $450,000 for the purchase of energy and wheeling charges.

In 1955 the appropriation for operation and maintenance was $2,165,000, which, together with a transfer of $775,000, made a total of $2,940,000 available for that fiscal year. However, $61,500 of the operation and maintenance appropriation was transferred to the Office of the Solicitor in accordance with provisions contained in the 1955 Interior Appropriation Act. After this transfer a total of $2,478,500 was available for the Administration's 1955 operation and maintenance program. This program was carried out under the following activities and amounts: System operation and maintenance, $540,000; purchase of energy and wheeling charges, $1,590,000; power contracts and rates, $55,000; and general administration, $293,500. As the result of a survey team report made in the fiscal year 1954, reorganization of the Administration, together with a reduction in force plan, was executed in the fiscal year 1955.

It is estimated that $1,134,000 will be needed to carry out the operation and maintenance program for 1956 under the following activities and amounts: System operation and maintenance, $425,000; purchase of energy and wheeling charges, $450,000; power contracts and rates, $55,000; and general administration, $204,000. This program is based on performing only the essential functions pertaining to the operation and maintenance of the Administration's transmission system; carrying on negotiations for the marketing of power with preferred customers and private utilities for the purchase, sale and interchange of electric power and energy; and providing customer services.

Operation and Maintenance

System operation and maintenance, $425,000

During the fiscal year 1956 the Administration will operate and maintain its transmission system, consisting of 1,004 miles of high-voltage lines and 18 substations and switching stations, and, also metering, communication, and protective equipment owned by the Administration but located at 7 federally owned hydroelectric powerplants and at 15 substations owned by interconnecting utility systems. Electric service to wholesale customers and, especially, the integration, exchange, and sale of power and energy with and to other electric systems make it important that the Administration's system be as reliable as the privately financed systems with which it is interconnected. An unscheduled outage of a line or station creates an electrical disturbance in all or part of the interconnected systems of the Southwest, which consist of electric generating and transmission facilities owned by Federal, State, and municipal agencies; rural cooperatives; and private companies. The results of such a disturbance range from simple inconveniences to major disruptions of service over a wide area and damage to facilities involving costly repair or replacement and loss of revenues. It is essential (1) that preventive maintenance be employed to minimize the frequency and extent of outages and (2) that facilities which have failed in service be repaired or replaced as quickly as required by the commercial needs of each such occasion.

Purchase of energy and wheeling charges, $450,000

Obligations to be incurred in fiscal year 1956 under this activity are based upon contractual arrangements for the purchase and sale of power, including service charges for the use of other utility systems in the transportation of power to the Administration's customers. Estimated fund requirements are listed below.

	Purchase of power and service charges
1. Oklahoma companies	$201,000
2. Western Farmers Electric Cooperative	18,120
3. N. W. Electric Power Cooperative	198,030
4. Central Electric Power Cooperative	8,100
5. M. & A. Electric Power Cooperative	24,750
Total	450,000

A detailed breakdown of the funds required follows:

1. Oklahoma companies:
   - Sale to preferred customers, 29,090 kilowatts and 137,595,000 kilowatt-hours.
   - Energy purchased from companies:
     - 137,595,000 kilowatt-hours − 115,196,000 kilowatt-hours = 22,399,000 kilowatt-hours.
     - 22,399,000 kilowatt-hours × $0.004 = 89,596
   - Service charge: 137,595,000 kilowatt-hours × $0.00125 = 171,994
   - Total 261,590
   - Sale to companies:
     - 29,090 kilowatts × .15 = 4,363 kilowatts.
     - 4,363 kilowatts × $1.15 × 12 months = 60,209
   - Total 201,381

2. Payment to Western Farmers Electric Cooperative:
   - Service charge:
     - Anadarko 600 kilowatts
     - Altus Air Force 600 kilowatts
     - 1,200 kilowatts × 4,400 hours = 5,280,000 kilowatt-hours × $0.00125 6,600
   - Purchase of power: 2,880,000 kilowatt-hours × $0.004 11,520
   - Total 18,120

3. Payment to N. W. Electric Power Cooperative:
   - Service charge:
     - Springfeld 15,000 kilowatts
     - Lamar 1,500 kilowatts
     - 16,500 kilowatts × 4,400 hours = 72,600,000 kilowatt-hours × $0.00125 90,750
   - Purchase of power: 26,820,000 kilowatt-hours × $0.004 107,280
   - Total 198,030

4. Payment to Central Electric Power Cooperative:
   - Service charge: city of Hermann, 600 kilowatts × 4,400 hours = 2,640,000 kilowatt-hours × $0.00125 3,300
   - Purchase of power: 1,200,000 kilowatt-hours × $0.004 4,800
   - Total 8,100

5. Payment to M. & A. Electric Power Cooperative:
   - Service charge:
     - City of Sikeston 3,000 kilowatts
     - City of Poplar Bluff 1,500 kilowatts
     - 4,500 kilowatts × 4,400 hours = 19,800,000 kilowatt-hours × $0.00125 24,750

Power contracts and rates, $55,000

The estimate covers funds for personal services and travel of the Division of Rates and Customer Service. The staff of this Division carries out all marketing agreements with preferred customers and private utilities for the purchase, sale, and interchange of electric power and energy.

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In order to perform the basic function mentioned above it is necessary for this staff to render service to the Administration's customers; to make continual analyses of power rates to insure that sufficient revenue is derived from the sale of power and energy for the amortization of the Government's investment in both production and transmission facilities; to calculate rates and prepare supporting pay-out studies for submission to the Federal Power Commission for approval; and to perform accounting and billing service for all contractual agreements for the purchase, sale and interchange of electric power and energy.

General administration, $204,000

The estimate for this activity includes the cost of personal services, travel, and other general administrative expenses chargeable to electric operations but not directly chargeable to a particular electric function, such as production, transmission, sales and customer services, etc. These costs cover the executive direction and service functions necessary to accomplish the overall program of the Administration. In former years a portion of these costs has been either charged directly or allocated on a percentage basis to construction. The Administration does not contemplate any new construction starts in 1956, and as the construction program initiated in former years will be completed in 1955 the costs incurred under this activity will be entirely chargeable to operation and maintenance.

Itemization of estimate

	Estimate 1955	Estimate 1956
FUNDS AVAILABLE FOR OBLIGATION		
Appropriation or estimate	$2,165,000	$1,134,000
Transferred to "Salaries and expenses, Office of the Solicitor, Interior, 1955" pursuant to Public Law 465	−61,500	
Transferred from "Construction, Southwestern Power Administration" pursuant to Public Law 465	+775,000	
Total obligations	2,878,500	1,134,000
OBLIGATIONS BY OBJECTS		
01 Personal services	714,500	520,000
02 Travel	78,000	73,000
03 Transportation of things	3,500	3,000
04 Communication services	21,000	20,000
05 Rents and utility services	13,000	10,000
06 Printing and reproduction	2,500	2,500
07 Other contractual services	2,004,000	465,000
08 Supplies and materials	41,500	26,000
09 Equipment		14,000
13 Refunds, awards and indemnities	100	100
15 Taxes and assessments	400	400
Total obligations	2,878,500	1,134,000

Statement of appropriations by fiscal years

1946	$110,000	1951	$760,000
1947	100,000	1952	1,255,712
1948	125,000	1953	1,450,000
1949	391,000	1954	1,600,000
1950	525,000	1955	[1] 2,165,000

[1] Includes $61,500 transferred to Office of the Solicitor, and $400,000 in the Second Supplemental Appropriation Act, 1955.

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GENERAL STATEMENT

Chairman HAYDEN. Mr. Wright, do you have a prepared statement?

Mr. WRIGHT. Yes, I do, Mr. Chairman. I would like to read it into the record, if I may.

Chairman HAYDEN. All right, sir.

Mr. WRIGHT. Mr. Chairman, and gentlemen of the committee, the Southwestern Power Administration requests $1,134,000 in the budget estimate for the fiscal year 1956 to accomplish its operation and maintenance program. No new construction starts are contemplated, and no funds are requested for that purpose.

In accordance with a reorganization plan, approved by the Secretary of the Interior, and initiated in the latter part of the fiscal year 1954, the staff of the Administration is being reduced to the minimum considered necessary to perform the essential functions pertaining to the operation and maintenance of the Administration's transmission system; carrying on negotiations with preferred customers and private utilities for the purchase, sale, and interchange of electric power and energy; conducting rate studies; and providing customer services.

The program will be accomplished under the following activities and amounts: System operation and maintenance, $425,000; purchase of electric energy and wheeling charges, $450,000; power contracts and rates, $55,000; and general administration, $204,000.

I will be glad to try and answer any questions the committee may have concerning our operations and this budget request.

We had a very complete hearing before the House committee, I believe the longest and most strenuous in which I have ever participated, about 8½ hours. There were at that time two items which I believe I might call to the committee's attention at this time.

LEASE OPERATING CONTRACTS

The question was specifically asked as to the difference of amounts of appropriations that would be required if lease-operating contracts were restored compared to that of the budget request, and since it is important that this be made by activities, with the chairman's permission, I would like to insert in the record a comparison of the estimates under the two conditions. In round numbers, it means that we would have to have an appropriation of $7,514,000 in lieu of $1,134,000 if the lease-operating contracts were restored which I believe will be the major issue discussed before this committee.

Chairman HAYDEN. That may go in the record. At the same time, also, your budget estimate for the year and the justification will be included in the record.

(The information referred to follows:)

Comparison of 1956 budget request with funds needed if G. and T. contracts are reinstated

	1956 budget request	Funds necessary if G. and T. contracts are reinstated	Increase
System operation and maintenance	$425,000	$1,035,000	$610,000
Purchase of energy, wheeling charge, and transmission rental	450,000	[1] 5,785,000	5,335,000
Power contracts and rates	55,000	77,000	22,000
General administration	204,000	617,000	413,000
Total	1,134,000	7,514,000	6,380,000

[1] Includes $200,000 for lease of Sho-Me Power Corp. transmission facilities. This item not included in tabulation filed with House subcommittee.

NOTE.—Tabulation does not show $355,330 for replacements shown in tabulation filed with House subcommittee.

Mr. WRIGHT. I have also been repeatedly asked exactly what the financial status of the Southwestern Power Administration is.

We have now operated 10 years, and we have prepared the best estimate we can of exactly where we stand financially today as to having paid or not paid out our commitments.

I would like to place this in the record, if I may, and I would like to discuss it.

Chairman HAYDEN. That may be done.

(The document referred to follows:)

Estimated accumulated surplus or deficit through fiscal year 1955

Fiscal year	Operating revenue [1] (1)	Operating expenses [1] (2)	Net operating revenue (3)	Interest and amortization 2½ percent, 50 years (3.526 percent) (4)	2½ percent interest [2] (5)	Total, cols. (4)+(5) (6)	Surplus or deficit, cols. (3)−(6) (7)	Accumulated surplus or deficit (8)
1945	$491,523	$219,530	$271,993				$271,993	$271,993
1946	1,269,893	291,128	978,765	$751,889	$82,750	$834,639	144,126	416,119
1947	1,474,422	351,705	1,122,717	751,889	82,750	834,639	288,078	704,197
1948	1,536,155	406,406	1,129,749	751,889	82,750	834,639	295,110	999,307
1949	1,681,896	378,523	1,303,373	751,889	82,750	834,639	468,734	1,468,041
1950	2,060,385	612,510	1,447,875	751,889	82,750	834,639	613,236	2,081,277
1951	2,308,256	1,000,319	1,307,937	1,298,626	64,800	1,363,426	−55,489	2,025,788
1952	2,668,133	1,458,166	1,209,967	1,595,399	64,800	1,660,199	−450,232	1,575,556
1953	2,984,643	1,808,033	1,176,610	1,657,056	64,800	1,721,856	−545,246	1,030,310
1954	4,767,545	2,945,674	1,821,871	3,904,325	152,250	4,056,575	−2,234,704	−1,204,394
1955	3,948,750	4,260,570	−311,820	4,716,819	152,250	4,869,069	−5,180,889	−6,385,283

[1] Adjusted by 2½ percent imputed interest.
[2] 2½ percent interest on plant held for future use and salvage value of land.

YEARLY COMPARISON OF FINANCIAL STATUS

Mr. WRIGHT. I will hand each member a copy of this. Briefly, if you will take a look at that tabulation you will note in the column next to the last on the righthand side which is the annual surplus or deficit, we operated in the black through the fiscal year 1950.

In 1951, we had a deficit of $55,489; in 1952, $450,232; in 1953, $545,246; in 1954, $2,234,704; and in 1955, $5,180,889.

The accumulated effect of surplus and deficit is that as of today we lack meeting the total obligations that we should repay, which includes all operating expenses of ourselves and the Corps of Engineers, amortization of the transmission line costs at 2½ percent interest, and amortization based on tentatively agreed to allocations to power on the costs of the dams at 50 years at 2½ percent interest, we lack $6,385,283 of doing this. We recognized we were in this difficulty in 1952, and at that time undertook certain rate readjustments to meet this.

At the same time, however, our program began to change course and the tornadoes, with resulting rainfall, we have had in Oklahoma in the last 2 weeks, while they filled our reservoirs, are no more severe than the course changes imposed upon Southwestern Power in the last 3 years. We had the worst drought the Southwest ever experienced. $3 million of this deficit is due to that drought.

We deferred in excess of a million dollars in power sales.

About a million dollars more, at least, is due to the change of relationship which the Congress decided we should make, on which, after 8½ hours in the House trying to make me comment, we still have no comment as to the action of Congress. However, this changed the direction of our program and that cost us about $1 million in readjustment of our direction and in these blood transfusions which Congress gave during the last 2 years of this period until some form of integration is found.

I would say about $4 million of the deficit is due to drought and these other things that could not be helped.

Two million dollars is adjustments that should have been made in rates and will be made as soon as we know what direction we are going.

We have a rate filed with the FPC, and have been talking about filing new rates with them for the last 4 years. We think we have to raise our rates from the base of about 5½ mills to a base of about 7¼ mills to overcome this deficit.

That picture has already been presented.

POWER RATES

Chairman HAYDEN. How does that rate compare with the rates at which power is being furnished by private enterprise in that area?

Mr. WRIGHT. Generally speaking, the rates of the Southwestern Power Administration have become the pattern rates of the Southwest.

The rates we have charged have been adopted by all of the companies, in the area, almost exactly with respect to cooperatives. In some cases even a little bit lower.

In the case of municipalities, our rate is some 2 to 3 mills lower than the general rates charged municipalities, by the companies.

In connection with that, Mr. Chairman, if I may, there is a great deal of discussion frequently about the effect of one of these Government power programs, on other people in the power business.

A great alarm is always sounded that a Government power program will bring on a different type of power operation in any area in which it is carried out.

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I have a map on my wall which shows among the other States in my area, the State of Kansas. I am sure that no one would consider that the State of Kansas was anything but the ultimate in conservative down-to-grassroots operation. When I looked at this map I was amazed to find that I had a lot more sequins showing publicly owned power systems on my map for Kansas than any other State in our area. I counted them and found that Kansas has twice as many municipally owned power systems as any other State in the Southwest, including Texas.

In other words, that is one thing that Texas is beat on.

We have never sold a kilowatt-hour of power to Kansas.

RATES IN KANSAS

The effect of our rates have permeated into the Kansas area.

I have here a map of the State of Kansas to show you that without any Government program the people in Kansas decided public ownership was the way many of them wanted to do business.

We have not changed that business a bit in the Southwest with this Government power program. In other words, we have partnership as you know with the private utility companies in Oklahoma. Everybody served out of this partnership arrangement likes it. The only trouble is that we do not have enough power to put in it to satisfy either our customers or the company or anybody else.

We have a partnership in Texas that is entirely satisfactory and one with Southwest Gas & Electric Co. in the southwest corner of Arkansas under which cooperatives are served.

The program down there is in good shape with the exception of a resolution of the relationships of integration between generating and transmission cooperative companies and the Government.

As you know, Congress denied an appropriation request of some $5,650,000 made in 1953 for the fiscal year 1954, and granted in lieu thereof $1,200,000 with the statement that none of that was to be used to implement lease-purchase contracts and that we were to find some alternate means of integration other than those contracts.

The Department of the Interior, under the direction of Mr. Aandahl, has done everything that I know that any Department could do, to find an alternate means of integration.

The Government end of a possible integration has been prepared and negotiated. Negotiations were carried on extensively with the Northwest Co-op and the Kansas City Power & Light Co.

So far as I know, and I am advised entirely informally, no arrangement has been yet arrived at between that company or that cooperative under which, a satisfactory integration could occur, although the Government has tossed its hydropower in there, to my way of thinking, a lot more concessionwise than it ought to have done, trying to find what Congress said it wanted us to do.

At the present moment, negotiations are on between the Empire District Electric Co. and the KAMO Cooperative. That is the second of the G. and T.'s. There are five of them. The Northwest and KAMO. That is two.

Negotiations are on between Sho-Me Power Corp. and the Union Electric Co. That is the third one.

I believe that the Farmers Western in Oklahoma—and they will undoubtedly tell you their position—have no negotiations going on; nor do I believe they feel they can make any. Why, they will have to tell you. I cannot.

The Central Cooperative is the fifth one at Jefferson City, Mo.

I believe they have determined that they have no negotiations which they can complete, but they will have to tell you that.

Now, we have been having interim arrangements allowing the time, Mr. Chairman, for this to happen. It does not take but one look at this balance sheet of ours to show that SPA cannot keep on giving blood to the G. and T.'s very much longer to help them live until we can find some permanent solution to this operation.

We have to find some answer to it.

In my judgment—and the Secretary may disagree with me; we sat side by side in the House hearing—in my judgment, you have three alternatives: First, integration must be found through satisfactory contacts with the utility companies under which the cooperatives can live. In the failure to do that, the cooperatives are going bankrupt unless the lease operating contracts are restored. I do not believe they could operate indefinitely, any one of them, in the circumstances of the power situation in the Southwest. They have to integrate. Their systems were designed for integration. Their power supply must come out of an integrated power supply and their facilities must be jointly used so they can be loaded.

None of the co-ops can load the facilities by themselves. Either the company or Government must load them.

I was interested in some questions I heard you ask Southeastern Power. We have a uniform rate in the southwestern area on all of the interconnected projects. On the Narrows Dam project and on the Whitney Dam project, which are not interconnected, we have a special rate, because unlike Southeastern, they are high-cost projects.

We have a uniform rate on the rest of it. The rate is the same to everybody, a uniform rate.

We hope to keep it that way and have one uniform rate for peaking service.

RATE INCREASE

Senator DWORSHAK. Do you think that will have to be raised in order to eliminate this operating deficit?

Mr. WRIGHT. Yes, sir; it will have to be, and we already have filed with the Federal Power Commission a new rate schedule effectuating the increase necessary to offset this deficit. It amounts to a raise, frankly, from about a five-and-a-half-mill rate to about a 6$\frac{9}{10}$-mill rate for the next 5 years, and then about a seven-and-a-quarter-mill rate.

That is geared, Mr. Chairman, very closely with the actual costs of power that are to be expected from other sources down there; in other words, increase in fuel costs makes this rise in rate not as obnoxious than it otherwise would be and less effective upon the total power picture than it otherwise would be.

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STEAM GENERATION

Senator DWORSHAK. Are you handling any steam generation now?

Mr. WRIGHT. We handle steam generation in these ways: Under the Texas contract we deliver 1 unit of the Denison Dam, 35,000 kilowatts to the Texas Power & Light Co. with 70 million kilowatt-hours. They deliver back to us for use in serving preferred customers up to 20,000 kilowatts, with about 80 to 85 million kilowatt-hours.

In other words, they furnish the extra hours out of steam.

In the Oklahoma contract, we have exactly the same arrangement.

In the Whitney Dam contract we sell to a generating and transmission co-op the entire output of Whitney. They turn around and sell it to a power company and then buy back from the power company the firmed-up power and the rates are all set.

In that case, the Government is selling only peaking power. That is the first of those contracts.

In the Narrows Dam contract, we are also buying back firm power from a power company.

Senator DWORSHAK. You are selling back firm power, but I meant are you actually building steam plants to generate power to sell?

Mr. WRIGHT. No, sir; in the first appearance of Southwestern before a committee of Congress, we asked for 2 steam plants, 1 to purchase a plant of Defense Plants Corporation in Arkansas, and another to build a steam plant at Gilmer, Tex.

The Congress told us they did not want us to build a steam plant and we have never requested one since.

I might say that both those plants were built, however, and are the best plants in the Southwest.

Chairman HAYDEN. Who built them?

Mr. WRIGHT. The Arkansas Power & Light Co. took over the defense plants job at Lake Catherine, and it was originally intended to have three 44,000-kilowatt units in it.

The Arkansas Power & Light Co. put in two 44,000-kilowatt units, increased the length of the other generator hole 6 feet, and put in a 98,000-kilowatt unit. They turned out about 210,000 kilowatts out of a plant that was cheap at 100,000 kilowatts.

I do not know if we would have been smart enough to do that or not.

Senator DWORSHAK. Who built the plant?

Mr. WRIGHT. Defense Plants Corporation built it in connection with the aluminum plant and they built the powerhouse and the water intakes, everything but installing the power equipment, and then were able to buy the power for the aluminum plant so they never did provide the generators or turbines. That was provided by the Arkansas Power & Light Co. after they bought the plant.

Senator DWORSHAK. Is the aluminum company still operating there?

Mr. WRIGHT. Yes, sir. The other plant was built by Southwestern Gas & Electric.

Chairman HAYDEN. I do not see how we can intelligently discuss this lease purchase subject matter until we know what the House has done, and I do not think there is any particular advantage in discussing one theory as against another theory of what might happen and so on.

If we have a concrete proposition that comes over from the House we can ask you to come in and comment on it.

I think that is the only satisfactory way to do it.

Senator DWORSHAK. I think that would be a very desirable way, Mr. Chairman.

Chairman HAYDEN. I might ask just one question.

REDUCTION IN PERSONNEL

I notice that this budget is based on an organization of approximately 90 employees, which is a substantial reduction below 190 which you had in fiscal '54. Has this reduction of personnel been made in an orderly manner?

Mr. WRIGHT. Yes; it has. We made it over a period of 2 years and, as might be expected, as soon as the word gets out that you are going to have a reduction, your good pilots start looking for another job. So, for the first year and a half of this, we ran about 10 to 15 employees under the proposed rate of reduction with nothing we could do about it.

If a man finds a job and he knows you are going to let him go in 6 months, you have to let him go now. That applies to women, too.

That actually happened with us out there and we have had to hold above the line during the last 6 or 8 months in order to catch up with the work that we expect to have finished. In other words, we are installing a lot of very delicate equipment.

Gentlemen, I do not know if you realize what has happened in the power business in the whole Southwest.

Every system is interconnected.

I cannot kick a switch open out there without hurting somebody else. I see Mr. Doyle of the Kansas City Power & Light Co. sitting here. His company, I believe, picked up 50,000 kilowatts of load when the hurricane hit the east coast up here. That is how interconnected these systems are.

There is nothing you can do about that.

We now are having the best minds in the utility business meeting together with the idea of trying to find out how to account for this power, whose power went where in these interconnected systems. It is a tremendous accounting problem.

For that reason, the Government's operation and the Government's equipment has to be right. There aren't any ifs, ands, or buts about it.

We are having to install equipment because of integration that we otherwise might not have to install as an independent operation, but if this country ever has a war, this integration will be the most vital thing in the power business that you could possibly have.

Chairman HAYDEN. Senator Magnuson, in your absence I said that it seems to me that there could not be much profit in discussing the various proposals for getting them out of this trouble down in that area until we know what the House has done.

And Senator Dworshak concurred that we put off a discussion as to whether it could be done this way or could be done some other way, and wait and see what the House does to it.

Then we will know where we are going.

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Senator MAGNUSON. I had a few questions I wanted to ask here, some of them general. It does involve a little of the problem of integration and most of these questions are suggested by those who are interested in this matter and who are not on the committee.

If Mr. Wright is coming back again, we can do that then, which is perfectly all right with me.

Chairman HAYDEN. He is coming back when we know what we are expected to pass upon in actual words which the House has enacted. I think that will be better because as it is now, any answer that Mr. Wright can give is problematic. It may be one way or another.

Senator DWORSHAK. Mr. Chairman, do you know when the House is going to act on this?

Mr. WOODRUFF. Not before the 10th of June.

Chairman HAYDEN. That will not be very long. As soon as we find out definitely what is being done over there, we will ask Mr. Wright to come back.

I think if that is agreeable to the committee, we will recess subject to the call of the Chair, and see what the House sends us with which to work.

Mr. WRIGHT. I have one more comment on this budget, Mr. Chairman.

This is the rock bottom budget of all time from Southwestern Power Administration. It will be the first time that we could not absorb a pay raise and the first time we have not returned money to Congress since the day we started.

Chairman HAYDEN. You do believe you have an adequate staff to carry on now?

Mr. WRIGHT. We think we can make it under the present arrangements, with a staff of 90 to 95 people.

Of course, if some other operating duty is imposed on us, we have placed in the record what we think it would have to be.

Chairman HAYDEN. We will stand in recess, subject to the call of the Chair.

(Whereupon, at 11:50 a. m., Tuesday, June 7, 1955, the hearing was recessed, subject to the call of the Chair.)

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PUBLIC WORKS APPROPRIATIONS, 1956

FRIDAY, JUNE 17, 1955

UNITED STATES SENATE,
BUREAU OF RECLAMATION AND INTERIOR
POWER MARKETING AGENCIES SUBCOMMITTEE
OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to call, in room F–37, the Capitol, Hon. Carl Hayden, chairman, presiding.

Present: Chairman Hayden, Senators Young, Thye, and Dworshak.

DEPARTMENT OF THE INTERIOR

BONNEVILLE POWER ADMINISTRATION

STATEMENT OF M. D. DUBROW, MANAGER OF WASHINGTON OFFICE, ACCOMPANIED BY L. W. KUDEJ, ADMINISTRATIVE OFFICER, BONNEVILLE POWER ADMINISTRATION

AMENDMENTS REQUESTED

Chairman HAYDEN. The committee will be in order.

The formal amendments requested by the Bonneville Power Administration will be included in the record.

(The material referred to follows:)

BONNEVILLE POWER ADMINISTRATION

CONSTRUCTION

(House hearings, western section, part 1, pp. 285–340, 482–485)

Appropriation 1955	$24, 314, 000
Estimate	15, 353, 000
House allowance	14, 600, 000
Restoration requested	0

Restoration of authority to construct facilities deleted by the House, within the amount allowed by the House.

HOUSE REPORT

"The committee has deleted the request of $42,000 for a study in the upper Olympic Peninsula service area as well as a request for initiation of construction of a 115-kilovolt line between Olympia and Aberdeen. Present and forecasted loads in these areas do not indicate the necessity for the items at this time."

JUSTIFICATION

204 *Upper Olympia Peninsula service*

Appeal: Restoration of authority to program $42,000 of total amount allowed by House.

63645—55——21

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An engineering plan of service to the upper Olympic Peninsula was adopted and approved in mid-1954 in connection with consideration of the Interior Department appropriation bill 1955. The facilities in item 204 are part of an overall plan developed to serve the Olympic Peninsula and Puget Sound areas as an alternate to previously approved facilities based on a submarine cable crossing between Snohomish and Kitsap.

This previously approved system addition consists of a second 115-kilovolt line between Shelton and Fairmount, and a 50,000-kilovolt-ampere substation at Fairmount to supplement the present facilities supplying the Port Angeles-Port Townsend area. Bonneville Power Administration facilities supplying the Port Angeles-Port Townsend area include the Shelton-Port Angeles 115-kilovolt transmission line and the Port Angeles 50,000-kilovolt-ampere substation. The transmission line is 87 miles in length, has a practical operating limit of 50,000 kilowatts and with heavy loading has high losses and poor voltage regulation. It is the sole source of Federal power to the important manufacturing centers in the Port Angeles-Port Townsend area. Power is supplied at Port Angeles to the Clallam County PUD, the city of Port Angeles, Crown-Zellerbach Corp. and Rayonier, Inc.

Based upon the most recent forecasts of customer loads, the existing facilities of the Administration will soon be loaded beyond the operating capabilities and system losses will be excessive. The following table shows the loads to be supplied and line loadings involved:

Years

[Kilowatts]

	1955–56	1956–57	1957–58	1958–59
Loads at:				
Port Angeles	39,000	55,000	34,000	35,000
Fairmount			[1] 29,000	[1] 30,000
Total	39,000	55,000	63,000	65,000
Line losses	[2] 5,000	[2] 9,000	[2] 4,000	[2] 5,000
Line loadings, Shelton	[2] 44,000	[2] 64,000	[3] 67,000	[3] 70,000

[1] Includes 6,000 kilowatts for Puget Sound Power & Light.
[2] 1 line.
[3] 2 lines.

To avoid overloading the Shelton-Port Angeles line and the Port Angeles substation, the 115-kilovolt line between Shelton and Fairmount and the Fairmount substation must be in service by the fall of 1958. The Shelton-Fairmount line will be approximately 60 miles in length and the Fairmount substation will include a 50,000-kilovolt-ampere, 115–69-kilovolt transformer bank, terminals for incoming and outgoing lines, and communication facilities.

Restoration of authority is requested to perform surveys and design during 1956 in order that the facility may be completed by the fall of 1958. This work can be performed within the total program allowed by the House.

209 Olympia-Aberdeen No. 2

Appeal: Restoration of authority to program $100,000 of total amount allowed by House.

The necessity for this second transmission line was determined on the basis of the estimated load in the Aberdeen Grays Harbor area and based upon the January peak system loads of 63,000 kilowatts in 1958; 67,000 kilowatts in 1959; 72,000 kilowatts in 1960 and with corresponding increases in subsequent years. These figures indicate that the second line is required by October 1958 to maintain satisfactory voltage conditions, to keep power losses within reasonable limits, and to improve system reliability. The existing Raymond-Aberdeen line is unreliable during bad weather and is difficult to properly maintain since it traverses heavily timbered areas and is subject to frequent and prolonged outages.

In addition to the system loads used as a basis of determining the merits of the second Olympia-Aberdeen line, there have been many new loads discussed for the area in lumber and wood-processing circles. One of these loads has now materialized. On June 9, 1955, the Weyerhauser Timber Co. announced that it will construct a 400-ton per day sulfite pulp plant on an 850-acre site at Cosmopolis, Wash., near Aberdeen. Work will start this year, and the plant should

be completed in 1957. Cost of the plant will exceed $20 million and will employ about 300 men and women. At present the company is negotiating with the Grays Harbor County PUD for the required power supply. Preliminary estimates indicate an initial load of 6,000 kilowatts, eventually reaching 15,000 kilowatts.

This development has made even more necessary the administration's proposed second line to serve the area, and it is requested that this item 209 be reinstated in the fiscal year 1956 construction program with all necessary funds authorized within the total program allowed by the House.

The work proposed in fiscal year 1956 on this facility consists of surveying and acquisition of a right-of-way for the transmission line.

BONNEVILLE POWER ADMINISTRATION

Operation and Maintenance

(House hearings, western section, pt. 1, pp. 285–340)

Appropriation 1955	$6, 200, 000
Estimate	6, 650, 000
House allowance	6, 500, 000
Restoration requested	150, 000

(P. 8, line 4)

Amendment requested:

Page 8, line 4, strike out "$6,500,000" and insert in lieu thereof "$6,650,000", the estimate, or an increase of $150,000 in the appropriation.

HOUSE REPORT

"The committee believes that a more diligent application of the principles set forth in the Secretary's survey team report on the Bonneville Power Administration will result in both increased efficiency and reductions in operation and maintenance expenditures below the amount estimted in the President's Budget."

JUSTIFICATION

The amendment restores the $150,000 reduction made by the House in the budget estimate. This amount is for the following activities:

Activity	Appropriation 1955	Budget estimate 1956	House allowance 1956	Restoration requested
1. System operation and maintenance	$5, 296, 115	$5, 816, 000	$5, 666, 000	$150, 000
2. Power contracts and rates	271, 725	229, 000	229, 000	0
3. General administration	632, 160	605, 000	605, 000	0
Total	[1] 6, 200, 000	6, 650, 000	6, 500, 000	150, 000

[1] Includes $57,385 transferred to Solicitor's Office pursuant to Public Law 465.

A breakdown of the restoration request by objects of expenditure follows:

01	Personal services	$115, 000
02	Travel	10, 000
05	Rents and utility services	5, 000
08	Supplies and materials	20, 000
	Total	150, 000

The House allowance of $6,500,000 for operations and maintenance is a reduction of $150,000 below the estimate of $6,650,000. This reduction in funds will prevent the administration from performing a safe and reliable operation and maintenance program which must necessarily keep pace with the growth of the transmission system that is provided to match the additional generating capacity coming into service as existing Federal dams are being built.

Restoration of the $150,000 is needed to provide $55,000 for system operations and $95,000 for system maintenance.

1. *System operations.*—Fifteen substation operator positions cannot be filled in 1956 unless the funds are restored. These operator positions are required to main-

tain the present manning levels as required for safe and reliable operation in accordance with standard utility practices.

2. *System maintenance.*—Restoration of the $150,000 is needed to provide $95,000 for system maintenance. Line maintenance climbing patrols for inspection of hardware, crossarms, insulators and pole top conditions will require $20,000, including 3 lineman positions. This type of inspection recently disclosed serious defects on one major grid circuit and is being corrected. The same conditions may exist on other circuits which only climbing inspection can verify. $20,000 is also needed for substation maintenance, including 3 electrician positions, in order to maintain the present maintenance levels. $55,000, including 9 engineer positions, is needed for standard maintenance of meters, relays, carrier, remote control and telemetering, radio and other communication facilities mandatory for reliable system control and power pool operation.

ADEQUACY OF HOUSE APPROPRIATION

Chairman HAYDEN. The first inquiry I would like to make is with regard to Bonneville Power Administration. I want to ask, first, whether you are satisfied with the appropriation made by the House for the Bonneville Power Administration.

Mr. DUBROW. Mr. Chairman, I am M. D. Dubrow, manager, Washington office, Bonneville Power Administration. We find that as far as construction appropriations go, we can carry out our program within the overall funds allowed by the House.

Chairman HAYDEN. In the House report it says:

> The committee has deleted the request of $42,000 for a study in the upper Olympic Peninsula service area as well as a request for initiation of construction of a 115-kilovolt line between Olympia and Aberdeen. Present and forecasted loads in these areas do not indicate the necessity for the items at this time.

UPPER OLYMPIC PENINSULA

The upper Olympic Peninsular item was $42,000. Will you discuss those two facilities?

Mr. DUBROW. Mr. Chairman, the upper Olympic Peninsula item is for funds to continue the planning on a 115,000-volt line, running from Shelton to Fairmount, and including a 50,000-kilovolt-ampere substation at Fairmount. We are seeking only those funds required to begin the preliminary design and preliminary surveys of that facility, which was actually approved by the Congress in 1954. We feel that we should go forward with that work in order to be able to bring that line in several years from now, when it will be needed.

Chairman HAYDEN. The question, as far as the House is concerned, is whether the present and forecasted loads justified building the line at all.

Mr. DUBROW. On page 7 of our appeal we have actually listed the forecast loads on the basis of the latest available information, and those loads have increased from 44,000 kilowatts in 1955–56 to 70,000 kilowatts in 1958–59, which, at that time, the second line would be required to carry that load.

Chairman HAYDEN. And you are quite sure that the market for the power will be there?

Mr. DUBROW. Yes, sir.

Chairman HAYDEN. Is there any opposition on the part of local utilities to the construction of this line?

Mr. DUBROW. No, sir. That line has been approved by our customers, and that facility, as were all of our facilities, were dis-

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cussed with all our customers, and they indicated general overall agreements on our budget, including that facility.

Chairman HAYDEN. What about this Olympia-Aberdeen No. 2. The request of $100,000, is for survey and planning?

Mr. DUBROW. The Olymia-Aberdeen No. 2 line is shown here, [indicating on a map] 115,000-volt line extending from Olympia to Aberdeen. For that facility, funds are requested for land acquisition in preparation to build that line.

The reason that it is imperative that we go forward with that line is that very recently the Weyerhauser Timber Co. has announced plans and initiated construction on a 400-ton per day, $20 million sulfite paper mill, which will employ 300 people. It will have an initial load of about 6,000 kilowatts, increasing to about 15,000 kilowatts in 1958, at which time we would plan to have the line in service. And with the addition of that load and the normal load growth, we would need this second line in order to provide service to that area.

Chairman HAYDEN. What do you mean by land acquisition?

Mr. DUBROW. Acquire the right-of-way over which the transmission line will be built.

Chairman HAYDEN. Is that expensive?

Mr. DUBROW. It varies. We are only asking for the $100,000 from funds which had been previously appropriated by the House.

Chairman HAYDEN. Do you have any difficulty in acquiring the right-of-way? Do you have to go through condemnation proceedings? That usually requires considerable time.

Mr. DUBROW. I was going to say, Senator Hayden, it is not so expensive as it is time consuming. It requires negotiations with the local people. We always try to negotiate those land acquisitions rather than resort to condemnation, and therefore we need to start that this coming fiscal year if we are going to have the facility ready in 1958.

Chairman HAYDEN. If you get the authority to use the $100,000, you might use it all during the next fiscal year and you might not; is that correct?

Mr. DUBROW. I think that is correct, sir.

Chairman HAYDEN. You ought to have the authority; but if you do not have the authority you could not acquire the land?

Mr. DUBROW. That is correct.

OPERATION AND MAINTENANCE

Chairman HAYDEN. How about the operation and maintenance?

Mr. DUBROW. Mr. Chairman, we are asking for restoration of $150,000 needed for operation and maintenance expenditures which are directly related to the growth of the system and to the addition of substations which have been added in the past year and which will be added in the coming year. Of the $150,000, $55,000 of it would be for substation operations and the remaining $95,000 for system maintenance.

Now, in order to man the additional substations at present standards, which are minimum standards for safe, reliable service, it will require 15 man-years of positions, and that is what the $55,000 is needed for.

In the case of system maintenance, the $95,000 which is needed will all be applied directly to maintenance. $20,000 of it will be for line maintenance climbing patrols to inspect the facilities and will provide three additional linemen.

Another $20,000 will be for substation maintenance, which will include three men to do that work.

Twenty-five thousand dollars will be for maintaining our meters and relays and controls which are necessary in the operation of the grid. And that will provide four engineers who are technical people who work on this equipment.

The remaining $30,000 is for five engineers who also will perform technical work directly on fault locators, telemetering and that sort of electrical equipment utilized in the operation and maintenance of the system.

Chairman HAYDEN. If you fail to have proper maintenance you could have outages that would result in losses of considerably more than $150,000.

Mr. DUBROW. That is quite true, Senator Hayden. If we fail to have the restoration of these funds we will have to reduce the manning standards for our substations and for line maintenance.

Now, those standards have been set forth in detail in pages BP104 to 107 of the budget document for manning standards for substations, and in pages BP108 to 113 for maintenance. We are certain that they are the minimum standards which you can have and provide reliable service and protect the equipment.

Chairman HAYDEN. There was testimony before this committee that those maintenance standards have been carefully checked with private industry, which maintains their lines.

Mr. DUBROW. They have been carefully checked with private utilities and with our customers, and I believe that there has been general agreement that those standards are minimum which we can use for safe operation of the system.

Chairman HAYDEN. Thank you, gentlemen.

Mr. DUBROW. Thank you, Senator.

BUREAU OF RECLAMATION

STATEMENTS OF W. A. DEXHEIMER, COMMISSIONER; ALFRED R. GOLZÉ, CHIEF, PROGRAM COORDINATION AND FINANCE DIVISION; FLOYD E. DOMINY, CHIEF, IRRIGATION DIVISION; D. S. CAMPBELL, CHIEF, POWER DIVISION; G. E. TOMLINSON, ASSISTANT CHIEF, PROJECT DEVELOPMENT DIVISION; H. T. NELSON, REGIONAL DIRECTOR, BOISE, IDAHO, AND F. M. CLINTON, REGIONAL DIRECTOR, BILLINGS, MONT., BUREAU OF RECLAMATION

GENERAL INVESTIGATIONS

Chairman HAYDEN. Next we have before us the Bureau of Reclamation.

As to general investigations, I want to make an inquiry about that. The House committee recommended a substantial reduction in the funds for general investigations. However, on the floor of the House the amount was increased to within $71,000 of the budget estimate.

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I understand the Department is not requesting this amount be restored. What items would be eliminated under the House allowance?

Mr. DEXHEIMER. Mr. Chairman, the House action, as I understand it, on the general investigations funds for the Bureau of Reclamation, gave us the full amount of the budget request, except for $71,000, and they further stated that no part of the general investigations appropriation for this fiscal year was to be used on planning for the Blue-South Platte project. We have not been carrying on planning on that project for some time and do not at this time appeal for restoration of that amount.

However, it is necessary that we carry on certain very minor work in collection of basic data which can be useful to anyone who may be interested in the stream gaging and other things for the utilization of the waters in that area.

Chairman HAYDEN. What was your request of the Bureau of the Budget for general investigations?

BUDGET ALLOWANCE

Mr. DEXHEIMER. Our request was for $6,165,000. The allowance by the Bureau of the Budget was $5,175,000.

The House action allowance was $5,104,000, a reduction of $71,000.

Chairman HAYDEN. I think it would be of interest to this committee if you would submit for the record a list of the project investigations that have to be deferred as a result of the Bureau of the Budget reduction. In other words, what would you have done if the Bureau of the Budget had allowed the full amount you requested?

Mr. DEXHEIMER. Yes, sir. We can submit that for the record. Essentially we would expedite some of the planning work on projects which we are now planning, and we would initiate some new ones. We will submit the list of them for the record.

(The information requested follows:)

BUREAU OF RECLAMATION

GENERAL INVESTIGATIONS PROGRAM

For fiscal year 1956 the Bureau of Reclamation submitted a request to the Bureau of the Budget for $6,165,000 to continue its General Investigation program. Of this amount the Bureau of the Budget approved an allowance of $5,175,000 with the application of the general reduction of $990,000 left to the discretion of the Bureau. Based on a careful analysis of the relative merits of the individual investigations proposed for fiscal year 1956 as well as the urgency of the study, the extent of local interest, etc., the following studies were deferred as a result of this reduction.

Items deferred

RECONNAISSANCE INVESTIGATION

Investigation and location	*Fiscal year 1956 request submitted to Bureau of Budget*
Sterling project, Utah	$12,491
Reconnaissance investigation needed to complete appraisal of lands in the Cache Valley; 9,300 acres of new and 3,000 acres of supplemental irrigation proposed for lands too high to be served by nearby canals.	
Walker River project, California-Nevada	20,478
Reconnaissance investigation needed to determine possible improvements in late-season water supply flood control, and development of dependable local power supply. Needed now so as to integrate with well-advanced Washoe project.	

Items deferred—Continued

BASIN SURVEYS

Investigation and location	*Fiscal year 1956 request submitted to Bureau of Budget*
Bear-Yuba River Basin, Calif	$80,000

Basin investigation needed to determine plan for fullest, most practicable development of waters of the Bear and Yuba Basins. Yuba is second largest undeveloped water supply in Sacramento Valley. More water is needed in foothill areas.

PROJECT INVESTIGATIONS

Deer Lodge Valley project, Montana	38,000

Project investigation needed to appraise this large potentially irrigable area of 50,000 acres of dry land and 5,000 acres needing supplemental water. Development of irrigation in this area would intensify agricultural production and strengthen general economy.

Eureka Flats project, Washington	41,500

Project investigation needed to appraise about 85,000 acres of potentially irrigable land in the vicinity of the Ice Harbor Dam site. This authorized dam, when built, would provide project water from its reservoir.

John Day project, Oregon	126,339

Project investigation needed to plan irrigation development of about 300,000 acres. Surrounding areas are developing rapidly, and a demand may be expected for this development soon. Investigation will require 5 or 6 years, so should be started now.

Plymouth project, Washington	27,755

Project investigation needed to plan development of about 3,000 acres of potentially irrigable land near McNary Dam, which is nearly built, and which would serve as the source of the irrigation water.

Calleguas project, California	25,000

Project investigation needed to determine feasibility of much needed irrigation and domestic water supply. Future development of area dependent on obtaining additional water supply. (Water users have recently indicated a willingness to provide matching funds in the amount of $150,000, with the goal of shortening the time required for the entire feasibility investigation to one year.)

Central Valley project, Rubicon unit, California	50,000

Project investigation needed to plan development of new water supplies to meet growing demand for water and power in Rubicon River watershed. Reregulation downstream from Folsom Dam will contribute to power development.

Central Valley project, Friant power unit, California	15,000

Project investigation needed to determine feasibility of installing a powerplant at the existing Friant Dam. Recent rising trends in power cost make such development desirable.

ALASKAN INVESTIGATIONS

Yukon River Basin	44,000

Reconnaissance investigation needed to determine potentialities of this great international stream. Need information to protect interests of the United States in current developments going forward in Canada.

Total items deferred	480,563

In addition to the above items deleted in their entirety as a result of applying the general reduction of $990,000, it was necessary to reschedule in such a way as to balance the effect on both regions and personnel. Of necessity, some changes were additive while the majority were subtractive. For this reason, the sum for the eliminated projects plus the sum of the following curtailments differs by $65,000 from the total net effect of $990,000. The following list shows the fund reductions below estimated levels which were considered as most desirable and economical.

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Items reduced

Investigation and location	*Reduction in fiscal year 1956 program as submitted to Bureau of Budget*
RECONNAISSANCE INVESTIGATIONS	
Lower Colorado River Basin, new areas	$55,000
Yampa-White River projects	18,633
BASIN SURVEYS	
Central Valley project	20,000
PROJECT INVESTIGATIONS	
Central Valley project, Avenal Gap	20,000
Holbrook project	49,000
Winslow project	23,000
Gulf Basin project	72,000
San Juan-Chama project	25,000
ADVANCE PLANNING	
Central Valley project, Trinity River division	200,000
Santa Margarita project	65,000
ALASKAN INVESTIGATIONS	
Matanuska Valley	27,000
Total items reduced	574,633
Total items deferred	480,563
Total curtailment	1,055,196
Reduction required	990,000
Balance available for items retained in program	65,196

ITEMS ADDITIONAL TO ORIGINAL 1956 ESTIMATE SUBMITTED TO BUREAU OF BUDGET

As a result of developments in the field subsequent to formulation of the request submitted to the Bureau of the Budget for fiscal year 1956, there are a number of other investigations which are urgently needed and which the Bureau intends to undertake as soon as funds are available therefor. These investigations and the estimated fund requirements for the first year are:

Investigation and location	*Fund requirements for 1st year*
1. Chief Joseph Dam project, Washington Chilan and Alameda Divisions	$40,000
Investigations are now under way on Greater Wenatchee Division and are to be initiated on the Okanogan-Similkameen Division in fiscal year 1956. Strong local interest in early development of Chilan and Alameda Divisions justifies start of similar study on latter divisions as soon as possible.	
2. Cold Springs project, Oregon	57,000
This potential project would involve some 36,700 acres of new land to be served from the McNary Dam in the Columbia River. Early study of its feasibility highly desirable because of strong local demands for irrigation.	
3. Central Valley project, Folsom south unit, ultimate development	50,000
A feasibility report on Folsom south unit to serve about 200,000 acres is to be completed this fiscal year. Because of local interest in additional development in area adjoining present unit boundaries, consideration has been given to providing capacity in principal supply facilities to ultimately serve the additional area. Early investigation of feasibility of serving adjoining area through facilities of San Luis unit is needed.	

Investigation and location	*Fund requirements for 1st year*
4. Lower Rio Grande rehabilitation project	$24,000
The Bureau is presently engaged in a cooperative rehabilitation and drainage survey on three districts of the existing lower Rio Grande project and expects to initiate a similar study on one other district in fiscal year 1956. A request has been received from 2 more irrigation districts and 1 drainage district for this same type of survey with the local interests contributing funds to match the Federal investment.	
5. O'Neal Park project, Colorado	20,000
Early reconnaissance of this 7,600 acre project needed to permit State of Colorado to select those projects to which its share of the upper Colorado River waters should be allocated. Early study also needed to determine its effect on Navaho project on which feasibility study was recently completed.	
6. Parshalls project, Colorado	50,000
City of Denver is presently contemplating diversion of water from Williams River on western slope. Early study of Parshalls project needed to evaluate effect of any such diversion on ultimate development of project.	
7. Red Bluff project, Texas	10,000
A request was recently received from Red Bluff Water Power Control District for a rehabilitation survey of that project, with the local interests to advance one-half of the cost of the work. Study should be initiated as soon as possible.	
8. Yakima project, Washington, Roza and Sunnyside Division, rehabilitation survey	13,000
Negotiations are now underway with officials of Roza and Sunnyside regarding a cooperative survey of the feasibility of providing facilities to relieve an existing serious drainage problem. Local interests are to advance one-half of cost of study.	
9. Palisades reregulating Reservoir, Idaho	85,000
Because of the increase in demands for hydroelectric energy in southern Idaho, early investigation is needed of feasibility of reregulating reservoir below Palisades Reservoir, now under construction, to increase output of Palisades powerplant and to generate additional energy.	
10. Duncan Ferry project, Oregon	40,000
Serious water shortages on existing Owyhee project warrants early study of feasibility of providing storage capacity on Owyhee River to supplement present inadequate supply.	
11. Vale project, Bully Creek extensions, Oregon	30,000
The Bully Creek extensions involves providing storage to serve some 4,000 acres of new land within Vale project boundaries. Early study necessary to ascertain effect of extensive watershed improvement program proposed by Department of Agriculture on project plan.	
Total items additional to original 1956 estimate submitted to Bureau of Budget	419,000

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SUFFICIENCY OF BUDGET ALLOWANCE

Chairman HAYDEN. I think it would be good to have that kind of information at this time. If I may state my own personal opinion—and I think Senator Young will agree with me—we have always felt in the Senate committee that the Bureau of the Budget does not recommend enough money for purposes of general investigations. I might add that I don't think the Congress has allowed enough either.

Senator YOUNG. I do not think we ever have, and it has cost the Federal Government a lot of money because we did not.

Chairman HAYDEN. Taking a long view of what has happened, the more accurate information you have to go into a project the better off

you are. And as Senator Young says, if you do not have such information you do things that cost you money and you waste the time and effort, and in many instances it is very embarrassing to Senators because things will not work out.

Pembina River Project, North Dakota

Senator Young. Mr. Chairman, may I ask: If the Senate concurs in the House action—and I am sure we probably will be increasing it—but if the Senate concurs in the House action, will there then be funds for the Pembina River, which I made a request for a while back?

Mr. Dexheimer. That could be provided; not now, as I understand it, under the House action, but by final wording in the Senate or conference report. For example, the House, by their action of yesterday, as I understand it, approved advance planning funds for the Trinity project, as provided in the budget justification. If we were given some money on construction to be used as advance planning and later for construction in case that is authorized during this Congress, then $400,000 could be released for reprograming within the investigation appropriation. The Pembina River in North Dakota investigation among others could be started with that money.

Senator Young. That is a little involved. I would like to be more sure. How can I be more sure that there will be funds for investigation of Pembina River? You say there are funds in the bill now as it comes from the House for the project which you just mentioned. Was that not in Nebraska?

Trinity River Project, California

Mr. Dexheimer. Under the House action, as I understand it, there is included about $400,000 of planning money for the Trinity River Division of the Central Valley project in California.

Senator Young. And will that not all be used?

Mr. Dexheimer. It will depend on the final action of Congress. It is now available for advance planning under the House action. But if the project is authorized in this Congress and some money is given to us under the construction and rehabilitation appropriation item to use for advance planning and later to apply to construction when and if the project is authorized, then we could reprogram some of that planning money in the general investigation appropriation, and the Pembina River in North Dakota could be included.

Senator Young. Otherwise we would have to add additional money and earmark it; is that it?

Mr. Dexheimer. We have some latitude, Senator Young, to move our investigation funds around, and if it is the desire of the Congress, I think we could arrange to start the planning on that project even though we did not get this other fund released.

Chairman Hayden. If I may interrupt: Are you in any kind of straitjacket now? That is, do you not have the latitude you ought to have with the investigating money, or what would we have to give you to give you a little more leeway?

Mr. Dexheimer. Yes, sir; we have the latitude now, Senator, and if it is the express desire that this project investigation be started, I can assure you we will arrange to start it.

Chairman HAYDEN. We can take care of that in the report, then.

Senator YOUNG. Yes, that will do it.

Where are the funds for investigation of the Garrison diversion project? That is included in which item?

Mr. DEXHEIMER. They are included in the construction and rehabilitation funds for the Missouri River Basin project.

Senator YOUNG. And we will get to the Missouri Basin a bit later then, will we?

Mr. DEXHEIMER. The House action restored the full amount of the budget request on our construction and rehabilitation fund.

Senator YOUNG. How much money will that leave available for Garrison diversion investigations?

Mr. DEXHEIMER. $850,000.

Senator YOUNG. Under that appropriation, could you proceed with the development farm at Sheyenne?

Mr. DEXHEIMER. Yes, sir.

Senator YOUNG. And that would be done under the House appropriations?

Mr. DEXHEIMER. Yes, sir. If the House action stands in the final bill, that will be done.

Chairman HAYDEN. Senator Dworshak, do you have any questions on this?

PALISADES DAM ON SNAKE RIVER

Senator DWORSHAK. Yes, one, Mr. Chairman. Thank you.

Do you have any money included in your engineering and economic investigations funds to initiate a thorough study of the proposed reregulating dams south of the Palisades Dam on Snake River?

Mr. DEXHEIMER. No, sir, we don't have funds for that work in the budget request, nor in the funds approved by the House yesterday.

Chairman HAYDEN. However, if you have the full budget estimate for general investigations, you could do this work.

Mr. DEXHEIMER. We would be all right, of course. We would need approximately $85,000 for work on the reregulating dams for this coming fiscal year.

Senator DWORSHAK. At the previous hearing before our subcommittee, it was indicated that the Bureau would be eager to undertake this investigation as a very vital part of the Palisades operation, and at that time it was proposed that possibly money could be earmarked from the Palisades construction account, because the projects would probably be subsequently tied together. What is the recommendation of the Bureau on that? Would you prefer to have some funds placed in the general investigations fund, or to earmark some from the Palisades account?

Mr. DEXHEIMER. I believe that we do not have authority now to use Palisades construction money. An earmarking in the general investigation fund, I think, would be the proper procedure.

Senator DWORSHAK. Officials of the Bureau have testified, though, that they believe a reregulating dam would materially expand the effective operation of Palisades and therefore it can be assumed that the two dams would probably be operated as a single unit if the reregulating dam is constructed.

Mr. DEXHEIMER. That is correct, Senator Dworshak, and we feel very strongly that that reregulation is necessary for both the irrigation and for the most beneficial use of the power facilities.

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Chairman HAYDEN. Let me get this straight in the record. If, as a result of action by the Congress you start construction on some project that you had in the planning stage, then the planning money would come out of the construction money allotted to that project, and that would release to you more money for planning someplace else; do I have that right?

Mr. DEXHEIMER. Yes, sir. As soon as we have an authorized project with an appropriation of construction funds, then the construction fund is used to do any advance planning.

Chairman HAYDEN. As part of the cost of the project?

Mr. DEXHEIMER. Yes, sir.

Chairman HAYDEN. Therefore, you could do additional investigative work with the funds provided.

Mr. DEXHEIMER. Yes, sir.

Senator DWORSHAK. Why did you not ask for some money in the budget for this reregulating dam survey and study?

Mr. DEXHEIMER. It came up after our budget was submitted to the Budget Bureau, Senator.

Senator DWORSHAK. Which was submitted last summer or fall?

Mr. DEXHEIMER. Last fall.

Chairman HAYDEN. Was that included in your original request of the Budget?

Mr. DEXHEIMER. No, sir. This reregulating dam was not submitted in our original request. It came after our budget request went to the Budget Bureau.

Chairman HAYDEN. But, with these shifts you think you can take care of what Senator Dworshak wants?

Mr. DEXHEIMER. With specific mention in the report of that reregulating reservoir, yes, sir.

Senator DWORSHAK. Within the amount which has been appropriated by the House, you want some specific language authorizing this engineering study. But would the funds be available from the amount already approved by the House, which is $4,485,000?

Mr. DEXHEIMER. Senator, I think that we can go ahead with the investigation on the reregulating reservoir below Palisades, if the Senate committee, in their report, says that that is the way they want some of the money used, without earmarking any specific amount.

Senator DWORSHAK. So that you can bring in a report next spring possibly?

Mr. DEXHEIMER. Yes, sir.

CONSTRUCTION

Chairman HAYDEN. If there are no further questions about general investigations, let us talk about construction.

The Budget estimate was $146,041,000, the House committee recommended $113,821,000. The House allowed the full budget estimate of $146,041,000. In view of this action what is your opinion as to how the House allowance could be allocated to the project in accordance with the Budget estimate?

Mr. DEXHEIMER. I only have two items on which the House action is not clear in allowing the full dollar amount of the budget request. Our interpretation of the House action yesterday is that it includes the

changes in the letter written to you, Senator Hayden, dated April 29, 1955, and to the chairman of the House Committee on Appropriations, making a reduction in the amount requested for the lower Marias unit, Montana, of $2,825,000, and putting that money on the Glendo unit, Wyoming in the amount of $2,120,000, Hanover-Bluff unit in Wyoming at $290,000, and the Missouri Basin project investigations of $415,000.

Chairman HAYDEN. That letter which was addressed to me appears at page 50 in our hearings.

Mr. DEXHEIMER. Yes, sir.

And we also interpret the House action yesterday as including House Document No. 161 of the 84th Congress, 1st session, which is entitled "Communication from the President," transmitting a supplemental appropriation in the amount of $3,700,000 for the Department of the Interior in the form of an amendment to the budget for the fiscal year 1956. That $3,700,000 would be for purchase of bonds on the middle Rio Grande project.

Chairman HAYDEN. That is included in the $146,041,000.

Mr. DEXHEIMER. Yes, sir.

TRINITY DIVISION, CENTRAL VALLEY PROJECT

Chairman HAYDEN. What is the situation with regard to the funds for initiation of construction of the Trinity division of the Central Valley project? You mentioned that before.

Mr. DEXHEIMER. In the House report, on page 9, under Central Valley project, it includes this language:

> The committee recommends $11,300,000 for the Central Valley project, a reduction of $2,700,000 in the budget estimate of $14 million. The sum recommended by the committee includes $1 million for initiation of construction on the Trinity River division of this project, which is to be obligated by the Department upon the specific authorization of this division by the Congress * * *.

Chairman HAYDEN. That has been authorized?

Mr. DEXHEIMER. No, sir. The action has not yet been completed to reauthorize it. It was originally authorized by finding of the Secretary in 1952, but legislation to reauthorize it has been introduced into the Congress.

Chairman HAYDEN. What is the status of that legislation?

Mr. DEXHEIMER. It will, I believe, be called for a vote on the floor of the House on Wednesday next.

Chairman HAYDEN. Then in the light of that circumstance, what do you want to do?

Mr. DEXHEIMER. We would like very much to have authorization in the bill or report to utilize $1 million for start of construction under the same language as I just quoted from the House report and in addition to use it for advance planning as well as construction.

Chairman HAYDEN. Then in that case, that again would relieve you, so that the amount included for planning could be used some place else?

Mr. DEXHEIMER. Yes, sir. That is where I confused Senator Young a few minutes ago.

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DELTA FISH-PROTECTION FACILITIES

Chairman HAYDEN. The other statement in the House report was:

The committee has disallowed the request of $1,345,393 in the program for the delta fish protection facilities, which are estimated to cost $4,500,000. While some device might eventually be needed to protect the fish, especially the fingerlings, from the pumps in this area, it would appear that the amount proposed is excessive to the needs. The present program should be thoroughly reviewed and appropriate reductions made before the project is again presented to the Congress * * *.

What is your comment on that?

Mr. DEXHEIMER. We have, Senator, been studying that fish problem for a great many years. We have worked with the State of California and the Fish and Wildlife Service of the Department, and we have all agreed that the plan we have now is probably the best and the most economical that can be developed to accomplish the salvage of the fish in that delta. And we believe that we could not come up with a better plan by postponing construction and making a further study of the problem.

Chairman HAYDEN. If you do not do anything about it, what is the effect on the fish industry?

Mr. DEXHEIMER. It would be, according to the surveys, very detrimental, because of the large number of small fish that would be sucked into the pumps and up into the canal, where they would no longer be available in the delta.

STONE-CORRAL UNIT, FRIANT-KERN SYSTEM

Chairman HAYDEN. They also say that:

The committee has also denied the request for funds for the Stone-Corral unit of the Friant-Kern distribution system pending execution of a repayment contract for this unit.

Do you have a repayment contract yet?

Mr. DEXHEIMER. No, sir. But we expect to have it very shortly, and we would be severely handicapped if language of this type and the type that they used in this report generally, of denying us funds pending execution of a repayment contract, were adopted. We would probably lose a year or more in each case were we required to wait for the actual execution of those repayment contracts until we had construction money.

Chairman HAYDEN. But you are highly confident that you will get a repayment contract in the near future; are you?

Mr. DEXHEIMER. We would not proceed nor spend any construction money until we do.

Chairman HAYDEN. In other words, if the money were made available for that purpose, until you get an actual contract you will not spend it?

Mr. DEXHEIMER. That is correct.

Chairman HAYDEN. In that sense you comply with the spirit of what the House had in mind in denying it?

Mr. DEXHEIMER. It is my intention of complying not only with the spirit but with the word of that in all cases. But I would be severely handicapped if we had to wait and go back for an appropriation after we had a repayment contract. And certainly the people who are doing

their best to work out these repayment contracts and the necessary court procedures would be very discouraged if the Congress persisted in the language they have in this House report.

UNOBLIGATED BALANCES

Chairman HAYDEN. What is your latest estimate of unobligated balances on construction and rehabilitation? We always have that item.

Mr. DEXHEIMER. Yes, sir. We were financed almost to the full amount of the budget request this present fiscal year, and we always have some delays.

Mr. Golzé has the figures. I will ask him to give them.

Chairman HAYDEN. Good.

Mr. GOLZÉ. Mr. Chairman, our estimate of the total amount of unobligated balance on June 30 is $12,197,572. Of that amount, $5,783,429 is to be applied to various projects as shown in the justification submitted to the Congress, and $1,743,000 is committed to work appropriated for in previous years. That leaves us an estimated unapplied balance available of $4,406,000.

Chairman HAYDEN. How much could be used for new work without endangering any project for which Congress provided funds?

Mr. GOLZÉ. The latter figure, $4,406,000, sir.

Chairman HAYDEN. Then if this committee saw fit to indicate how it would like to see this four-million-odd dollars expended, would it be helpful to you?

Mr. GOLZÉ. Yes, sir.

MIDDLE RIO GRANDE PROJECT

Chairman HAYDEN. There is another question I want to ask in connection with the middle Rio Grande project. The House committee recommended $5,800,000, a reduction of $1,400,000 below the budget estimate. However, the action of the full House restored the full budget estimate for this project. Could the estimate for the middle Rio Grande project be reduced by that amount of $1,400,000 inasmuch as that amount is available in the guaranty fund that will be deposited in the Treasury when the Government buys the bonds? Does that give you that much slack?

Mr. DEXHEIMER. Yes, sir.

Chairman HAYDEN. Could you give us a few details on this item?

Mr. GOLZÉ. The estimate for the Middle Rio Grande project was $7,200,000, with instructions from the budget to use $3 million from carryover in addition—a total program of $10,200,000. The action of the House yesterday in effect approved the $7,200,000 of appropriated funds. The committee report of the House suggested that $1.4 million in the guaranty fund be applied to this bond purchase. That would have the effect of cutting back the amount of carryover required to $1.6 million, thereby releasing $1.4 million more of carryover, that could be added to the figure I gave a few minutes ago of $4,406,000.

Chairman HAYDEN. Then that is the additional sum that could be earmarked by this committee, if this report indicated where it desires to have the money spent?

Mr. GOLZÉ. Yes, sir.

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MECCA-BLYTHE BRIDGE

Chairman HAYDEN. We have another old friend here, the Mecca-Blythe Bridge.

Under "Drainage and minor construction" the House report stated:

> The sum of $160,000 is recommended for drainage and minor construction, a reduction of $188,000 in the budget estimate. The committee directs that none of the funds previously appropriated for construction of a highway crossing for the Mecca-Blythe Highway across the Coachella Canal be obligated for this purpose, but that such funds be applied to essential features of the construction program of the Bureau of Reclamation.

What about the Mecca-Blythe Bridge?

Mr. DEXHEIMER. We have a contract, Senator Hayden, with the State of California, which obligates us to build a bridge in that vicinity. There has been very little interest in it except on the part of a few local people. If funds are denied, we would be in the position of being in violation of our contract.

Chairman HAYDEN. What is the cost of the project?

Mr. DEXHEIMER. We have carryover funds reserved for that bridge of $223,145.

Chairman HAYDEN. As I recall the funds to complete the Coachella division of all-American canal were provided by special language in the 1953 Interior Act. If these funds are not used to build this bridge, and you decided to go ahead later it would require specific language; would it not?

Mr. DEXHEIMER. I believe that is right, but I do not know about the authorization limitation. I would have to check that with the lawyers.

Chairman HAYDEN. There was in the authorization act a limited amount to complete the project. Then we wrote in another act stating that certain moneys could be used in excess of that authorization to complete the project. So you had better look into this very carefully and let us know just what the legal status is with respect to these funds. Do you see what I am getting at? I do not want to have a misunderstanding about it.

Inasmuch as we have a contract to build this bridge, I think we should be sure what we are doing when we use these specific funds for other work.

Mr. DEXHEIMER. I will be glad to look into the legal phase of that, Senator Hayden.

Chairman HAYDEN. We will be much obliged if you will get that for us for this hearing record.

(NOTE.—The information requested will be furnished the committee.)

TALENT DIVISION, ROGUE RIVER PROJECT

Chairman HAYDEN. What is the status of the Talent Division of the Rogue River project? How much money will be needed for the initiation of construction of this project for fiscal 1956?

Mr. DEXHEIMER. $500,000 would give us a very good start on that project.

Chairman HAYDEN. What is the total estimated cost?

Mr. DEXHEIMER. $21,065,000.

Chairman HAYDEN. How much of that total is reimbursable?

Mr. DEXHEIMER. Mr. Nelson, regional director, I think has that figure.

Mr. NELSON. The allocation to flood control is $338,700 and the balance will be reimbursable, either from the water users or the power. $11,429,000 is allocated to irrigation.

JUSTIFICATION

Chairman HAYDEN. My suggestion is that you put a justification for the project in the record.

Mr. NELSON. We have such a statement.

Chairman HAYDEN. Can you do that?

Mr. NELSON. Yes, sir.

(The information referred to follows:)

CONSTRUCTION AND REHABILITATION, TALENT DIVISION, ROGUE RIVER PROJECT, OREGON

Summarized financial data

Estimated total obligations		$20,560,855
Total obligations to June 30, 1954		[1] 0
Total obligations, fiscal year 1955		[1] 0
Allotment, fiscal year 1956	$500,000	
Total obligations, fiscal year 1956		500,000
Balance to complete		20,060,855

[1] Preconstruction work financed under general investigations activity.

JUSTIFICATION OF ESTIMATE

Authorization

The Talent Division of the Rogue River Basin project was authorized for construction under Public Law 606, 83d Congress, 2d session, approved August 20, 1954.

Location

The project is located in southwestern Oregon in Jackson County extending from Howard Prairie Dam and Reservoir to Medford, Oreg., through the area known as Bear Creek Valley. The towns of Ashland, Talent, Phoenix, and Medford are in the project area.

Description

The plan for development of the Talent Division is primarily an extension of the works of the Talent Irrigation Division and includes facilities to supplement the water supply for 9,250 acres of the Talent, Medford, and Rogue Irrigation Districts now inadequately served. A total of 8,640 acres of new land will also be developed. The additional water is to be derived from tributaries of the Little Butte Creek by diversion into the South Fork, Big Draw, and Dead Indian Collection Canals, for conveyance over the Cascade Divide to the new Howard Prairie Reservoir of 62,000 acre-feet capacity in the Klamath Basin. Thence the water will be diverted back across the Cascade Divide into the Bear Creek Basin by the Howard Prairie delivery canal, which also intercepts additional flows of small streams by the construction of such features as Keene Creek Dam and Reservoir. Prior to discharge into Bear Creek, the diverted water will pass through the Green Springs powerplant to develop 16,000 kilowatts, thereby utilizing the 1,800-foot drop between the Klamath and Rogue River Basins. After passage through the power drop, most of the new project supply of 45,000 acre-feet will be reregulated in Emigrant Reservoir which is to be enlarged from its present capacity of 8,000 to 45,000 acre-feet. The remaining work to be undertaken on the division includes enlargement and improvement activities on the Ashland, East, West, and Talent laterals and sublaterals. The Phoenix Canal and sublaterals will similarly be enlarged and improved. The improvement and extension of the drainage facilities will be carried on as required.

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Repayment

A repayment contract is scheduled for completion and execution with the Talent Division water users by October 1, 1955. The power investment and interest will be repaid in a period of 49 years and after that period the power revenues, in addition to irrigation revenues, will be applied to the irrigation allocation. Complete payout of all features would be accomplished in 60 years.

Status

A feasibility report has been completed, including preliminary land classification. During fiscal year 1955 a detailed land classification is being made, a definite plan report prepared, repayment contract studies and negotiations conducted and some design work on two canals. The fiscal year 1955 work is being performed with general investigations, advanced planning funds. Estimated total cost of the project is $21,065,000 (anticipated total obligations $20,560,855).

Work proposed, fiscal year 1956

Under the first construction appropriation for fiscal year 1956 preconstruction work will be advanced, designs and specifications will be prepared and construction started in a manner leading to the concurrent completion of the initial division facilities in time for the 1959 irrigation season.

Justification

The economy of the area in which this project is located is based primarily on agriculture and lumbering activities. The present water supply for the land now being irrigated is wholly inadequate to insure full crops each year with a serious detrimental effect on the local economy. The construction of the Talent Division represents the most feasible method of relieving this situation. Development of the division will also add about 8,640 acres of irrigated land which would further strengthen the economy of the area.

In the transbasin diversion of water there will be a drop of about 1,800 feet. To utilize this potential head, a powerplant of 16,000 kilowatt capacity should be constructed as part of the project facilities. The generation available from this plant will help alleviate the widely recognized power deficiency in the Pacific Northwest and the power revenues will repay the portion of the cost of the irrigation facilities beyond the repayment ability of the water users.

Provo Project, Deer Creek Powerplant

Chairman Hayden. The Senators from Utah are very much interested in the Deer Creek powerplant. Did you make a request of the Bureau of the Budget for the funds for the Deer Creek plant on the Provo River?

Mr. Dexheimer. Yes, sir.

Chairman Hayden. Are any plans made to have this a partnership project?

Mr. Dexheimer. We have discussed that in various phases with the water users for a good many years, and they have now formally requested that the Bureau of Reclamation build the powerplant because they were unable to finance it by other means.

Chairman Hayden. Could you use construction funds this year?

Mr. Dexheimer. Yes. We could use $300,000.

Chairman Hayden. What would be the total cost of construction?

Mr. Dexheimer. I do not have that right now; may I supply that for the record, sir?

JUSTIFICATION

Chairman Hayden. I am sure the Senator from Utah would appreciate it if you would put a justification for that in the record.

Mr. Dexheimer. Yes, sir. We will be glad to do that.

(The information referred to follows:)

CONSTRUCTION AND REHABILITATION, DEER CREEK POWERPLANT, PROVO RIVER PROJECT, UTAH

Estimated total cost	$1,051,000
Total obligations to June 30, 1954	72,950
Allotment request, fiscal year 1956	300,000
Balance to complete	678,050

JUSTIFICATION FOR DEER CREEK POWERPLANT

The Provo River project in north central Utah, conceived for the conservation of water resources and utilization of the water conserved, was authorized under the provisions of the Reclamation Act of December 15, 1924 (43 Stat. 701), on November 16, 1935, the President on that date having approved a finding of feasibility submitted by the Secretary of the Interior.

The Deer Creek powerplant was authorized by the Secretary on August 20, 1951.

The principal purpose of the Provo River project is to supply storage water to the Provo-Salt Lake City area for irrigation, municipal, and industrial uses. Incidental to this principal purpose is the production of power.

Approximately two-thirds of the project water will be conveyed from the Weber River to the Provo River through the Weber-Provo diversion canal and one-third of the supply will be conveyed from the North Fork of the Duchesne River in the Colorado River Basin through the Duchesne Tunnel to the Provo River. The water from both sources will be stored in the Deer Creek Reservoir and thereafter released for irrigation, municipal, and industrial purposes.

In order to have a feasible project, it was necessary to obtain a portion of the winter power water from the Weber River to which the Utah Power & Light Co. had a prior right. A contract was negotiated with the Utah Power & Light Co. for obtaining the power water originating above the Echo Reservoir on the Weber River on the basis that the resultant losses in power production on the Weber River would be replaced. The power contract, dated 1938, is a very important one to the Provo River project.

The feasibility of the Provo River project was based on an estimated average annual yield of 100,000 acre-feet of storage water. This can be obtained only if all power water possible under the power contract is diverted from the Weber River to the Provo River. A powerplant at the Deer Creek Dam is an essential part of the project for making up the winter power losses at the Weber and Riverdale plants of the Utah Power & Light Co.

The Deer Creek Dam was completed in 1941 as a feature of the Deer Creek Division of the Provo River project. Provisions for the powerplant were incorporated in the original project plans and the dam was designed to permit the most economical, the most flexible, and the most efficient operation and the replacement of the power and energy losses to the existing hydroelectric plants on the Weber River. The penstocks and outlet works were designed so that they would be suitable for power generation and the powerplant substructures was constructed for two generating units.

A point which should be stressed is that the diversion of winter power water from the Weber River, as the Provo River project approaches full use of its water supply, is contingent upon the ability of the project to replace the daily power losses on the Weber River during the winter months by making power replacements concurrently as specified in the power contract.

Funds were first requested from Congress in 1940 for the completion of the powerplant and then again for fiscal years 1942, 1943, and 1947. World War II accounts for the gap between 1943 and 1947, at which time the scarcity of material and labor made construction of the plant impossible. Negotiations by the water users for construction of the plant by interests other than the Government account for the gap between 1947 and the present date. The association by formal request dated February 17, 1955, has asked that the plant now be constructed by the Government.

The total estimated cost of the Deer Creek powerplant with two 2,500-kilowatt units, substation, tie line, and two operators' houses is $1,051,000. Of this amount, $72,950 has been expended for the existing substructure which has been built as part of the Deer Creek Dam.

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YELLOWTAIL DAM

Chairman HAYDEN. For a number of years this committee has had requests for funds for the initiation of construction of the Yellowtail Dam, a feature of the Missouri River Basin project.

The Subcommittee on Irrigation and Reclamation of the Senate Committee on Interior and Insular Affairs has passed a resolution urging that funds be appropriated to initiate construction of this project. This resolution will be included in the record.

(The resolution referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
June 16, 1955.

Hon. CARL HAYDEN,
Chairman, Senate Committee on Appropriations.

DEAR CARL: Enclosed is a resolution adopted unanimously by the Subcommittee on Irrigation and Reclamation of the Senate Committee on Interior and Insular Affairs recommending an appropriation to initiate construction of Yellowtail Dam (Montana), Missouri River Basin project. The resolution reviews some of the points raised at a hearing held by the subcommittee on March 23, 1955. Copies of the hearings and of a committee print reviewing recommendations for construction of Yellowtail Dam and Hardin irrigation unit are attached. Pertinent correspondence is also included in the material.

If further information is desired, the committee staff will be available to furnish it.

Sincerely yours,

CLINTON P. ANDERSON, *Chairman.*

RESOLUTION

Whereas Yellowtail Dam, Mont., is an authorized unit of the Missouri River Basin project under the Flood Control Act of 1944, and is essential to the control and regulation of the system for flood control, irrigation, and hydro power production; and

Whereas the present Secretary of the Interior and his two immediate predecessors have recommended budget estimates to start construction of Yellowtail Dam after attesting to its feasibility; and

Whereas hearings were held by this subcommittee on March 27, at which Bureau of Reclamation spokesmen reaffirmed the feasibility of Yellowtail Dam and the Hardin irrigation unit, which hearings with subsequent correspondence have been printed (No. 61721); and

Whereas the Federal Power Commission, by letter to this committee, reaffirms the salability of and market for 185,000 kilowatts of power from Yellowtail Dam in the eastern division alone of the Missouri River Basin system, thus confirming its feasibility as an integral unit of the Missouri River Basin project, as found by the Department of the Interior; and

Whereas a so-called partnership proposal arising from a suggestion by the Bureau of the Budget looking to the sale of falling water to, and the installation of power-generating facilities by private utilities is indefinite and at least requires firming up and a more definitive proposal supported by adequate financial analyses, since such a proposal to become effective requires legislative authorization by the Congress; and

Whereas the House Interior and Insular Affairs Committee by resolution of May 4, 1954, recommended that Yellowtail Dam be programed for immediate construction: Therefore be it

Resolved by the Subcommittee on Irrigation and Reclamation, That it concurs with the House Committee and recommends an appropriation to initiate immediate construction of Yellowtail Dam, with provision for later installation of power-generating facilities, and the construction of the Hardin irrigation unit; and be it

Further resolved, That the Secretary of the Interior be requested to pursue discussions with the private power interests concerned with a view to advising the subcommittee from time to time so that the initiation of the construction of Yellowtail Dam will not be delayed, pending evaluation of any partnership proposal; be it

Further resolved, That the Secretary of the Interior be requested to continue land right-of-way negotiations with the Crow Indian Tribe for Yellowtail Dam to a fair and just settlement, during construction, that reserves the right of the Crow Tribe to maintain an appropriate action against the United States for just compensation in the event a satisfactory settlement is not reached; be it

Further resolved, that the Senate Appropriations Committee be advised of this action by a copy of this resolution to the end that suitable steps be taken to place Yellowtail Dam and the Hardin irrigation unit under construction in fiscal year 1956.

Adopted by the Subcommittee on Irrigation and Reclamation June 16, 1955.

CLINTON P. ANDERSON, *Chairman.*

LETTER FROM SENATORS MURRAY AND MANSFIELD

Senator HAYDEN. I have received a letter from Senators Murray and Mansfield in which they urge that funds be provided for the project, with a provision to assure protection of the rights of the Crow Indians. This letter will be included in the record.

(The letter referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
June 15, 1955.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
United States Senate, Washington, D. C.

MY DEAR SENATOR HAYDEN: This is a further answer to the question you raised yesterday during conversations with Senator O'Mahoney and Charles Murray, regarding proper protection of Indian rights and claims in the matter of any appropriate action initiating construction of Yellowtail Dam which is a matter of considerable import in Montana and Wyoming.

We are glad that you emphasized the need of protecting the Indian interests on this project, and share with you that desire. We feel that this can and should be done.

The situation regarding the Indian interest in the Yellowtail-Hardin project is that construction will inevitably confer great benefits on the Crow Indian Tribe, and that tribe desires to insure securing the maximum financial and physical benefits. Long ago the Office of Indian Affairs and the Bureau of Reclamation reached an agreement on settling Indian claims which, under changing representation of the Crow Tribe and because of procedural difficulties, has not yet been formally ratified by the Crow Indian Tribe. Such procedure is time consuming and the Indians as well as the other water and power consumers from Yellowtail should not be denied all benefits by permitting this situation to block initiation of construction of the Yellowtail-Hardin project for with proper precaution in protection of the Indians fair and just settlement can be achieved in the several years required for the actual construction of the project.

Looking for a pattern and procedure to achieve this end, we believe that you have shown us the way through the solution of a parallel problem that for some years impeded the construction of the Palo Verde weir, part of which is in your State. In that instance the Congress decided to proceed with the project by writing in language authorizing and directing the Secretary of the Interior to secure a fair and just settlement for the Colorado Indian Tribe during construction, and specifically reserving to the tribe the right of recourse and appeal to the courts if dissatisfied with the settlement made by the Secretary of the Interior.

The same approach, which seems to us eminently appropriate while at the same time assuring the Indians earlier benefits than they could otherwise obtain if construction is further delayed, can be utilized to protect the Crow rights in connection with Yellowtail-Hardin, and we so recommend.

We are suggesting that the Committee on the Interior and Insular Affairs adopt this approach, which was so successfully used in the Palo Verde matter, in any expression it may make regarding initiation of construction of the Yellowtail-Hardin project, and appreciate your pointing out to us the need for insuring protection of Indian rights in this matter.

Sincerely yours,

JAMES E. MURRAY, *Chairman.*
MIKE MANSFIELD.

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Chairman HAYDEN. I would like to know what is the status of the plans of this unit.

Mr. DEXHEIMER. They are very well along and practically ready for letting a contract for construction of the dam and powerplant.

Chairman HAYDEN. Did you request funds of the Bureau of the Budget for this project?

Mr. DEXHEIMER. Yes, sir. We requested $5 million.

Chairman HAYDEN. What is the minimum required to get this project under construction?

Mr. DEXHEIMER. About $3,500,000 is the minimum that would give us an effective program for the fiscal year.

Chairman HAYDEN. What is the status of the proposed partnership plan for this project?

Mr. DEXHEIMER. The Senate committee asked the Under Secretary to investigate that, and he did with the two companies expressing an interest in a partnership proposal and reported back to the Senate subcommittee shortly after May 1. But the Montana Power Co. and the Pacific Power & Light Co. have not yet come up with what we would call a definite proposal which we could present to the Congress. And in any event, our going ahead with the construction contract for the dam need not interfere with what might be worked out on a partnership arrangement.

Chairman HAYDEN. Then was your request of the Bureau of the Budget for funds for construction based upon a partnership or not?

Mr. DEXHEIMER. No, sir; our request was not, originally. But the Bureau of the Budget had suggested later that we investigate that, and also the Senate subcommittee. We are in the process of doing that, but it will take some months for the power companies to come up with a firm proposal after they study the data available and the power output.

Chairman HAYDEN. In the meantime you could proceed with your plans and some initial construction without in any way interfering with the possibility of a partnership plan later?

Mr. DEXHEIMER. Yes, sir.

(NOTE.—Detailed justifications on the Yellowtail unit appear on p. 690.)

PARTNERSHIP PLAN

Chairman HAYDEN. Would a partnership plan require additional legislation by Congress, or can you do it under existing law?

Mr. DEXHEIMER. We have certain authority under existing law to lease facilities for a period of 40 years or less, but I do not believe that the existing authority we have would be adequate to be attractive to a partnership proposal by private or other public agencies in developing the power and investing the money that they would have to invest. I think it would require specific legislation in any of the cases that we might have a partnership proposal on at this time.

INDIAN PROBLEM

Chairman HAYDEN. What is the Indian problem there?

My recollection is that Mr. Yellowtail had some views, and I do not know whether the rest of the tribal council agree with him or not.

Mr. DEXHEIMER. The present status, Mr. Chairman, is much different than it has been over the past several years. Mr. Robert

Yellowtail is no longer the head of the tribe. The new tribal council heads have been cooperating with us, and we with them, in trying to arrive at what they believe would be an adequate compensation for their rights in the reservoir area. We have flown them over the project and discussed it fully with them, and we feel that it will be a very short time before the Crow Indians will present a figure which they think would be adequate to compensate them for whatever rights they have in that area.

Our previous appraisal did not satisfy them. I do not know that it will be under the present tribal council, but, in any event, it is our hope and belief that we can soon settle on an amicable basis with the Crow Indian Tribe. Anyway, that problem need not delay going ahead with the project, because we know that that can be worked out, and certainly an appropriation for construction would expedite our settlement.

Chairman HAYDEN. Definitely it would indicate that something is going to be done.

Senator O'MAHONEY. May I make a comment on that?

Chairman HAYDEN. Certainly.

Senator O'MAHONEY. I am chairman of the Subcommittee on Indian Affairs of the legislative Committee of the Interior and Insular Affairs. I am also a member of the Subcommittee on Irrigation and Reclamation. This subcommittee yesterday adopted a resolution which was intended to make it clear that settlement with the Indians is independent and apart from the construction work which Mr. Dexheimer is now supporting. And I think without any question I could speak for the whole Interior Committee when I say to you that the settlement can undoubtedly be worked out with the Indians, and we do not need to wait for that settlement to proceed with whatever work is supported by the budget and by the committee.

Mr. DEXHEIMER. Thank you, Senator O'Mahoney. I had that feeling and I am glad to hear you say that.

Senator O'MAHONEY. And I would also like to add, Mr. Chairman, that with respect to the so-called partnership agreement between the Department of the Interior and the private power, that also is a question which remains to be settled. I personally doubt, as Mr. Dexheimer, whether the Department of the Interior has the present legal authority to enter into any such agreement. We have had a development out in that area by which the Pacific Power & Light Co. has absorbed the Mountain States Power Co. in the State of Wyoming, and is now working in harmony with the Montana Power Co., or they are endeavoring to work out some sort of a joint plan.

So the picture that you have in these western reclamation States, where reclamation now, to a great extent, depends upon the development of public power, is a movement which might easily sidetrack all public power and, at the same time, result in a deprivation to the rural electrification cooperatives of the advantage now granted to them by law, of a priority right to public power.

Personally, I feel very strongly that I cannot see how anybody can claim that an REA cooperative is any less free enterprise than an interstate power combine. So that it is a matter of greatest importance to the Government and to the people of these States that we should not permit any partnership agreement which would have the effect of strengthening the hands of the companies working with Ebasco in

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New York and weakening the hands of the local residents who have contributed their money to build up REA, as well as borrowed money from the Rural Electrification Administration—money which they are paying back. The REA cooperatives have made an excellent record in repaying Government loans, and they are, without question, local, private enterprises, supported by the Government; which has resulted in creating new markets for all sorts of manufactured products—not only electrical products but products of all kinds.

The farmer's life, as a result of REA, has been transformed from a life of drudgery and sometimes desolation into a life which has all the benefits of modern invention and science.

So I know the Interior Committee wants to look carefully into any proposed partnership agreement and its effects upon the people of our States.

JUSTIFICATION

Chairman HAYDEN. I think with that statement now, Mr. Dexheimer, I would like to have you insert in the record a statement showing the description, status of plans, and amount of funds necessary to initiate construction on the Owl Creek unit of the Missouri Basin project.

Mr. DEXHEIMER. Yes, sir; we will submit that for the record.

(The information referred to follows:)

CONSTRUCTION AND REHABILITATION, MISSOURI RIVER BASIN PROJECT, BIGHORN BASIN DIVISION, OWL CREEK UNIT, WYOMING

Summarized financial data

Estimated total obligations		[1] $3,452,000
Total obligations to June 30, 1954		752,210
Total obligations, fiscal year 1955		15,000
Allotment, fiscal year 1956	$900,000	
Total obligations, fiscal year 1956		900,000
Balance to complete		1,784,790

[1] Includes $18,000 the National Park Service estimates will be required for recreation facilities.

JUSTIFICATION OF ESTIMATE

Location

Owl Creek unit is located in Hot Springs County, north-central Wyoming, the eastern end is within 4 miles of Thermopolis, Wyo., and the western end approximately 35 miles west of Thermopolis.

Description

The Owl Creek unit will provide a supplemental water supply for 15,891 acres of irrigated land. The acreage is situated along Owl Creek in a narrow strip extending from a point on the south fork of Owl Creek about 6 miles below Anchor Dam site to the confluence of Owl Creek and the Bighorn River. The integral parts of the system are Anchor Dam, 202 feet high, 550 feet long at the crest, to impound 17,300 acre-feet of water, a pumping plant, and a relief plant to raise water from the Bighorn River to serve 4,421 acres of land in the Lucerne area, thereby releasing Owl Creek water for use in the upper portion of the unit area. Construction period is estimated to be 2 years.

Repayment

On December 8, 1950, the district court confirmed the water service contract between the United States and the Owl Creek Irrigation District, and enlarged the original district to include all lands of the unit except for a small acreage. Objectors to the contract appealed the district court decree and the Wyoming Supreme Court, in February 1953, "reversed with instructions" the district court judgment, excluding all objectors from the irrigation district. A petition by the irrigation district for a rehearing of the matter was denied by the Supreme Court

in June 1953. By the act of August 28, 1954 (Stat. 690) the excess land laws were made inapplicable to the Owl Creek unit. By court order of March 11, 1955, a new district was confirmed consisting of 13,591 acres of privately owned land and 2,300 acres of Indian lands in the Arapahoe Ranch. The Arapahoe Ranch is a tribal holding operated by a manager to provide feed for livestock and for profit.

Negotiations for a repayment contract with the revised district have progressed well, and as of June 17, 1955, a contract generally acceptable to the district was being processed for submittal to the Secretary for approval as to form. This contract provides for repayment over a 40-year period at a slightly higher rate than the original water service contract. Since the elimination of the acreage limitation by the Congress and the removal from the contract of the other provisions objectionable to the court, it is anticipated that execution can be achieved in the near future. This position is further supported by the fact that the owners of the entire 13,000 acres of private land of the district are all volunteers who support the unit. There are no objectors within the boundaries of the reconstituted district. Repayment from the Indian lands will be on the same basis and at the same rate arrived at with the district. Furthermore, all provisions of the repayment contract, which were objectionable to the Supreme Court of Wyoming, have been eliminated.

The cost of constructing the unit is allocated as follows:

Irrigation	$3, 272, 000
Flood control	62, 000
Recreation	18, 000
Total	3, 352, 000

Status

The total estimated cost of the unit is $3,352,000 (estimated total obligations, $3,452,000) based on current prices. The detailed unit report has been approved, and the design data for the major structures has been gathered. On the Anchor Dam, designs and specifications are substantially complete. Due to the Supreme Court decision in 1953, no construction work has been undertaken.

Work proposed, fiscal year 1956

Anchor Dam and Reservoir ($576,615).—Designs will be completed, specifications prepared, and a construction contract awarded.

Lucerne pumping plants ($109,100).—Specifications will be issued, a contract awarded, and construction will be initiated.

Canals and conduits ($51,800).—Specifications will be issued and bids called for with the intent of starting construction late in fiscal year 1956.

Distribution lines and substations ($23,000).—Specifications will be prepared, a contract awarded, and construction initiated.

Justification

The primary purpose of the Owl Creek development is to provide supplemental water to land irrigated from Owl Creek and to improve the operation and maintenance situation for other lands now irrigated by pumping water from the Bighorn River. The present district includes 15,891 acres. However, the facilities to be constructed are adequate to supply the additional 2,170 acres included in the original district with no increase in primary facilities. If and when the owners of these additional lands indicate their willingness to execute repayment contracts, they will be included within the district and will receive storage water from Anchor Reservoir. In most years the water supply during May and the early part of June is sufficient, but the streamflows decline rapidly during the latter part of June so that there is very little water available in July, August, and September to mature crops. Water shortages of varying degrees have occurred in each of the 19 years from 1930 to 1948. The average shortage for those years was 40 percent of the requirement. The complete failure of grain crops and the harvest of only one crop of alfalfa is not uncommon in the frequent dry years. Construction of the unit and careful regulation and utilization of the water supply will alleviate the existing shortages.

STATUS OF PROJECT

Senator O'MAHONEY. Mr. Chairman, may I also ask some questions about the Owl Creek project?

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Chairman HAYDEN. Certainly.

Senator O'MAHONEY. The Owl Creek project was authorized several years ago, when I was a member of this committee. It has run into numerous difficulties of one kind or another. First there were some landowners who did not want to go into the project, and litigation resulted. And although this was an appropriation made back in the early fifties, the money was not expended because of the litigation and then there was a recission in the 1951 appropriation act. But now I understand it that all of this litigation has been cleared away, a repayment contract, which had not been drawn before, has now been agreed upon by the Billings office of the Reclamation Bureau and the settlers, and my understanding is that that was in the typewriters about 2 or 3 days ago, ready to be completed.

Is that not your understanding, Mr. Dexheimer?

Mr. DEXHEIMER. Yes, sir; that is correct, Senator.

Mr. O'MAHONEY. Has that repayment contract been sent on to you?

Mr. DEXHEIMER. I have not received it yet, but I expect it will be shortly.

Senator O'MAHONEY. And then, Mr. Chairman, some doubt was raised by attorneys for the solicitor's bureau in Denver, I mean the Solicitor's Bureau of the Department of the Interior, about some very old water rights on Owl Creek, and whether or not these water rights which have never been exercised, which have never been completed by construction, might rise to hamper the Owl Creek project.

The reclamation staff at Billings was confident that they did not constitute any difficulty. The attorneys in Denver, however, seemed to be afraid, and they needed a little education upon that point.

I think that Billings has now pretty well satisfied them that these old paper rights could not possibly be of any danger to the reclamation project. That is because, to use these water rights would require the private landowners to undertake construction work which is beyond their capacity, which is so expensive that they could not do it.

Chairman HAYDEN. In other words, it was a paper filing.

Senator O'MAHONEY. It is a paper filing, exactly.

Now, those were the two obstacles, which, in my opinion, have held up the Bureau of the Budget in submitting an estimate this year; the delay in getting the preliminaries out of the way; my understanding is that they are now all out of the way.

The construction program involves the building of the Anchor Dam and it also involves the installation of a pumping unit. My understanding is that the estimate of the Bureau of Reclamation is that the appropriation for the dam at this time ought to be about $900,000 and appropriation for the pumping units about $200,000.

Chairman HAYDEN. What are your figures, Mr. Dexheimer?

Mr. DEXHEIMER. That is essentially correct. We should have $900,000 for starting construction, and we have the plans for the dam and pumping plant well enough along so that we can start them this fiscal year if we have the money. We could also, with that appropriation, do work in fiscal year 1956 to the extent of about $109,100 on the pumping facilities.

Senator O'MAHONEY. May I add just this word, Mr. Chairman: The drought which has plagued so many areas in the West during the past year was particularly difficult in this area. It makes it

imperative, in the judgment of local engineers and of the residents of that area in the State of Wyoming and of the State reclamation association that this work be initiated at the earliest possible moment. So I am hoping that notwithstanding the fact that a budget estimate has not come over yet because of these difficulties of which I have spoken, that the committee will be convinced of the facts of the case, first, that this project was authorized 5 years ago, that appropriations were made, that they were not expended because of the litigation and of the rescission; secondly, because of the drought, of the apparent need of the project, that we give those people living in this Owl Creek Valley the encouragement of knowing that at least we are going to begin this thing.

I am asking the committee this—I do not think that you could spend the full appropriation now.

But you can spend $200,000, can you not, Mr. Dexheimer?

Mr. DEXHEIMER. We could spend the $900,000, which would initiate construction on the Anchor Dam and the pumping facilities.

ACREAGE LIMITATION OF SETTLERS

Chairman HAYDEN. I have a recollection that there is something about the acreage limitation of settlers there. What is the status of that?

Mr. DEXHEIMER. The act of August 28, 1954 (68 Stat. 890), exempts this project from the 160-acre limitation. This has removed the objection to the project on the part of the local people. And we think now we have full support of the people, and we will have no difficulty at all in getting the repayment contract executed.

Chairman HAYDEN. In view of the altitude, climate, and soil conditions, is it proper and necessary to exempt a project of this type from the 160-acre limitation?

Mr. DEXHEIMER. We think that in those cases, in high altitude or colder climates, that there is question on specific projects whether 160 irrigable acres is adequate for fully supporting a farm family. My personal opinion is that in such cases exceptions should be made by the Congress to that 160-acre limitation. It is fully justified in the Owl Creek unit.

Chairman HAYDEN. Take a country like my own where you have a growing season the year around, a given number of acres of land will produce more in 12 months than they will in others where you have a longer winter and shorter growing season. To make up for that, do you think that, in the case of this project, more acres are necessary in order to support a family?

Mr. DEXHEIMER. Yes, sir.

Senator O'MAHONEY. There is no doubt about that, Mr. Chairman. In the House yesterday, for example, as you know, the House committee cut the appropriation for certain reclamation projects in Wyoming, Nebraska, and other places, from about $146 million to $113 million. That whole cut was restored on the floor of the House yesterday, and one of the projects cut was the Eden Valley project in Wyoming. That was a project originally started under the Reclamation Act, and by a bill which I introduced several years ago it was authorized. That authorization made the Eden Valley exempt from that 160-acre limitation. It is a similar project.

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I think it might be well, Mr. Chairman, to note in the record here that, according to this morning's Congressional Record, on page 7189, the amendment offered by Congressman Miller of Nebraska on a division, that is, to restore this amount, on a division, was carried by a vote of 108 ayes to 56 noes.

When Mr. Rabaut demanded that the tellers count the vote, the result was 103 ayes to 79 noes.

So there is no question about it that the House has emphatically endorsed the budget estimate upon this matter.

I have no doubt that Mr. Dexheimer is aware of what happened in the House yesterday and probably it is well to have that pointed up.

Chairman HAYDEN. Senator Young, were there some questions you would like to ask the Commissioner?

Senator YOUNG. Talking about these projects, I had one in North Dakota which the chairman had something to do with. It is one of the best projects around there and similar to the one in Wyoming. We should have about $35,000 to $37,000, as I understand, to complete the project.

Mr. Dexheimer, do you have anything to say on that request? The request came to me from the people of Jamestown and vicinity.

JAMESTOWN RESERVOIR DEVELOPMENTS

Mr. DEXHEIMER. Senator Young, as you know we were authorized last year to spend certain funds for developing public safety and sanitary facilities in the Jamestown Reservoir area, and we were hopeful that the local people would go ahead with whatever additional expenditures to develop their recreational facilities, that might be necessary. We now have exhausted the funds that we had for that purpose on Jamestown Dam so that any additional expenditures there would have to have a specific endorsement available to us.

In other words, there is no carryover such as we had last year for that expenditure.

Senator YOUNG. The amount required to finish the job would be $25,000 to $37,000, I understand. And that could completely finish everything on the dam, would it not?

Mr. DEXHEIMER. No. We have in the budget, Senator, an item of $57,000 for completion of drainage wells downstream from the dam. But that would not provide funds for these other features which the local people would like to have.

Senator YOUNG. I had reference to the Jamestown Dam itself.

Chairman HAYDEN. How would we go about this?

Mr. DEXHEIMER. May I go off the record a moment?

Chairman HAYDEN. Yes.

(A statement was made off the record.)

Senator YOUNG. I note your statement a little bit ago that the local interests had not contributed much to these last facilities. I think they have.

Mr. DEXHEIMER. I would like to have Mr. Clinton, who is more familiar with that, answer that, Senator.

Senator YOUNG. Yes, sir.

Mr. CLINTON. The local people have made a sizable contribution there, as Senator Young has said. There has been heavy use of that reservoir by people from not only Jamestown but from all the sur-

rounding towns that has gone way beyond everybody's expectation of the extent of the facilities that would be needed to take care of it, to provide sanitation and so on.

This request, I take it, that Senator Young is making is to add to the facilities already there, some of which have been constructed by the Government with Federal funds, and some of which have been constructed by the local people, the county and the city.

Senator YOUNG. In my home town, which is a town of about a thousand population they have a little dam on the James River, put in there in WPA days, and there are people fishing at the dam from early in the spring to late in the fall, all day, rain or shine, windy, or cold, or hot. That is how much the people in that area crave a little fishing or a little water to have around them.

Mr. DEXHEIMER. Senator, I feel very strongly that there are a great many of our reservoirs that could be developed with additional money. But we are handicapped on obtaining funds for that purpose. I like to fish myself, and I do believe that it is a very minimum investment that the Federal Government could make. They would probably gain it back many times over in the taxes that they would get from fishing equipment and so on.

Senator YOUNG. And it would be too bad not to complete that construction now that we have invested so much money in it.

Mr. DEXHEIMER. Yes, sir.

Chairman HAYDEN. Senator Thye, do you have some questions you would like to ask?

Senator THYE. Yes, Mr. Chairman.

TRANSMISSION LINE

The question that is always uppermost in my mind in connection with this appropriation is your transmission line or what we normally refer to as the complete loop. We have been interested, of course, in the transmission line from Watertown, S. Dak., to Granite Falls. And then we have always thought you would not have a complete circuit there until you took in Benson, and then you would go on through to Fargo, which would give you the loop there that would permit the tying in between your private utilities that have steam plants, and your hydroelectric; which, of course, is your water. And if the water was low, your steam would feed back in, and if your water was high, your steam could be at a minimum. I think that would be the most economical plan that could be conceived or developed.

I note in the House report the amount allowed, $25,000, is to be used for planning, for construction of an extension of the Big Bend, S. Dak., to Granite Falls, Minn., transmission lines, to Benson, Minn. Now, is there enough money in this bill to assure that that is what will be allocated to Minnesota, to complete the project from Watertown to Granite Falls and from Granite Falls on to Benson?

Mr. DEXHEIMER. No, sir. The House committee, as you noted, specifically earmarked $25,000 for planning construction of that extension from Big Bend and so on, to Benson, Minn.

Senator THYE. Yes.

Mr. DEXHEIMER. The House action last night, as I understand it, had the effect of completely eliminating that item and an additional

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endorsement or instructions would have to be provided if we were to take care of that this fiscal year.

Senator THYE. Then what must we do here in the Senate appropriations bill; reinstate the $25,000 or is the $25,000 insufficient in itself, so that we would have to go to $30,000 or more? How much money would be necessary for that circuit from Watertown to Granite Falls and on to Benson?

Mr. DEXHEIMER. We would need language in the Senate report similar to that which was stricken from the House report.

Chairman HAYDEN. The Senate report stated that $25,000 was to be used for planning and construction of the Big Bend, S. Dak., to Granite Falls, Minn., transmission line to Benson, Minn. Would that accomplish the purpose?

Mr. DEXHEIMER. Yes, sir; the same language that was in the House report. And the $25,000 we feel would be adequate for this fiscal year.

Senator THYE. When would you need the transmission line to be completed in order to wheel the current? When would that line be needed?

Mr. DEXHEIMER. Mr. Clinton, could you answer that?

Mr. CLINTON. I can not say when actually it will be needed but it is definitely in the near future, Senator.

Senator THYE. Will it be needed in 1956?

Mr. CLINTON. No, sir. We would not have to start construction earlier than fiscal year 1957.

Senator THYE. But if you had no plans, then you would be delayed or hampered in getting your construction under way when it was completed.

Mr. CLINTON. That is correct.

Senator THYE. Therefore the planning funds are absolutely essential if you are to do an intelligent planning and preparing for the data that you would have to have for the transmission line to wheel that current?

Mr. CLINTON. That is correct, sir. The $25,000 will permit us to do the planning in fiscal year 1956, so that we would be ready to start construction when the line is needed.

Senator THYE. Thank you, Mr. Chairman. I believe that gives me the answers as to what we need to do on this side and what we need to do in conference if we are going to intelligently go forward. Thank you.

YAKIMA PROJECT, ROZA DIVISION

Chairman HAYDEN. Another matter that I would like to have you discuss, Mr. Commissioner, is the Roza powerplant. The original budget for the fiscal year 1954 included funds for the initiation and construction of the Roza powerplant; however, the revised budget submitted by Secretary McKay did not include funds for this purpose. I think I am correct about that; am I not?

Mr. DEXHEIMER. Yes, sir; that is correct.

Chairman HAYDEN. Did the Bureau of Reclamation make a request of the Bureau of the Budget for funds to start this powerplant in fiscal year 1956?

Mr. DEXHEIMER. Yes, we did.

Chairman HAYDEN. How much did you ask for?

Mr. DEXHEIMER. $386,000.

Chairman HAYDEN. Have you constructed any feature of this project which is dependent upon the powerplant for repayment?

Mr. DEXHEIMER. Yes, sir, we have. We have an investment in the transmission facilities to the pumping units in the irrigation project, and we also have approximately $1 million allocated to power in the canal that feeds water up to the point where the powerplant would be built.

Chairman HAYDEN. Then it is a construction feature depending upon the powerplant for repayment?

Mr. DEXHEIMER. Yes, sir.

Chairman HAYDEN. Is this powerplant the last feature of this division of the Yakima project?

Mr. DEXHEIMER. Yes, sir, that would essentially complete the unit.

Chairman HAYDEN. Does your contract obligate you to complete this plant?

Mr. DOMINY. The repayment contract, Senator Hayden, that Congress approved here a number of years back, predicated a return of $3,031,978 which can be recovered only if this powerplant is built. If the powerplant is not built, the costs in power and a little over a million dollars in irrigation costs would not be recovered under the Government-district contract.

Chairman HAYDEN. There is no question about the market ability of the power; is there?

Mr. DEXHEIMER. No, sir. The people, of course, are now getting some of their pumping power from the Bonneville Power Administration, but there is adequate market for the surplus in that area.

JUSTIFICATION

Chairman HAYDEN. I think that Senator Magnuson would like to have a statement included in the record in regard to this matter.

Mr. DEXHEIMER. Yes, sir.

(The statement referred to follows:)

CONSTRUCTION AND REHABILITATION, ROZA POWERPLANT, YAKIMA PROJECT, WASHINGTON, ROZA DIVISION

Total estimated cost	$2,913,000
Cost to June 30, 1954	60,689
Allotment request, fiscal year, 1956	400,000
Balance to complete	2,452,311

JUSTIFICATION FOR ROZA POWERPLANT

The very earliest engineering reports leading up to the original authorization of the Roza division of the Yakima project contemplated construction of a 10,000-kilowatt powerplant to be located at mile 10.9 on the main canal to utilize a 165-foot drop from the Roza main canal back to the Yakima River. The powerplant was incorporated in the original project plan primarily to provide pumping power to serve approximately 25,000 acres, located above the main canal, of the total project acreage of 72,000. This arrangement was provided for in an engineering report issued February 17, 1930, upon which the original repayment contract with the irrigation district was based as executed between the Yakima-Benton Irrigation District and the United States on December 13, 1935. Preliminary water filings by officials of the irrigation district, including those for the powerplant, were made prior to 1930.

The chief remaining uncompleted feature of the Roza division, outside of drainage works, is the Roza division powerplant. The United States has constructed

various facilities to serve the Roza division of the Yakima project including storage reservoirs, a diversion dam and canal headworks, the Roza canal and wasteways, the Roza switchyard and substation, transmission lines, pumping plants and substations, laterals, sublaterals, and appurtenant and incidental facilities. Continuing studies of the proposed powerplant have indicated that the canal capacity as constructed is adequate to supply a somewhat larger plant than originally planned. Current plans therefore propose a 11,250-kilowatt powerplant to consist of two 5,625-kilowatt generating units.

In accordance with the original repayment contract and with the original project plan, a diversion dam, 10.9 miles of main canal, wasteway No. 2 headworks structure, and tailrace to the Yakima River were all designed and built to provide capacity for the future installation of the powerplant, and the present investment in power canal capacity alone is approximately $1 million.

Two-thirds of the output of the proposed powerplant will be used to supply pumping power for use on the Roza division and the balance will be allocated and marketed as commercial power. At the time the main canal was constructed down to the location of the powerplant at wasteway No. 2, an additional investment was made to provide for power in the canal capacity which was in the late thirties prior to the outbreak of World War II. The decision was made with the concurrence of the irrigation district board that expenditures would be concentrated on the completion of the gravity canal and distribution system so that construction of the powerplant was deferred at that time. Following the outbreak of World War II, construction of the irrigation facilities of the Roza division was pushed to completion as a war food project, but due to scarcity of critical materials the powerplant was again deferred with the result that the entire irrigation system, exclusive of drainage but including all of the project pumping plants and associated substations and transmission facilities, was completed.

It is in the best interests of the water users and the United States that the powerplant be completed as soon as possible. First, to recover the total investment of some $3,031,978 which has already been invested in power canal and other costs and which are assigned for repayment from the powerplant. Prior to the availability of project power, irrigation pumps are being supplied from the system of the Bonneville Power Administration at a delivered cost of 0.5 mill higher than will be the case when the plant is completed. Finally, completion of the powerplant will furnish to the irrigation district a guaranteed and independent source of pumping power at a rate of approximately 2.75 mills per kilowatt-hour, which rate will cover all operating costs of the transmission facilities, including transmission losses and part of the cost of operating the diversion dam, headworks, and canal. Under the new BPA rate schedule effective December 20, 1954, the rate for power purchased from BPA for the district's pumps has been estimated to average 2.35 mills per kilowatt-hour at the points (Grandview and Roza substations) where the Bonneville power enters the project's seventy-odd-mile transmission line. In addition, the district is obligated to pay operating costs and transmission losses on the project transmission facilities. Also, the district pays all the O. and M. costs of the diversion dam, headworks, and canal, part of which will ultimately be jointly used for irrigation and power. This results in a present delivered cost of 3.25 mills per kilowatt-hour. After the cost of the powerplant is completely paid out, the district will receive pumping power at essentially the cost of operation and maintenance and replacements which would be considerably less than 2.75 mills.

An amendatory repayment contract (14–06–W–69, July 22, 1953) between the United States and the Roza Irrigation District provides for the repayment by the district of the cost of most of the facilities built to serve the district. In the course of negotiations prior to the signing of this contract, it was assumed that the Roza powerplant would be constructed by the United States and certain project costs were assigned for repayment from power revenues. The costs assigned for repayment from power revenues under article 8 (c) of the contract are:

(1) The cost of the Roza powerplant
(2) $1 million of the cost of the Roza Canal
(3) The cost of pumping plant transmission facilities
(4) $1,137,818 of the estimated cost of irrigation works.

The present estimate of the cost of the Roza powerplant is $2,913,000 and the cost of transmission facilities to serve the district's pumps is $894,160.

Items (2), (3), and (4) above totaling $3,031,978 are costs which have already been incurred and which will not be returned to the United States except by construction of the Roza powerplant. It is currently estimated that the Roza powerplant could be constructed and placed in operation in approximately 3 years.

STATEMENT OF SENATOR MAGNUSON

Chairman HAYDEN. Accordingly, we will insert at this point in the record the statement which Senator Magnuson has presented to the committee.

(The statement referred to follows:)

STATEMENT ON YAKIMA PROJECT, ROZA DIVISION, BY WARREN G. MAGNUSON, UNITED STATES SENATOR

Mr. Chairman, you will recall that early in the session we had an exchange of correspondence on the Roza powerplant. On February 14 I addressed a letter to you, asking that the Bureau of Reclamation be put on notice that they should be prepared to discuss this matter before the committee.

Under date of February 19 I received a letter from you, stating that you had requested the Bureau to come prepared to discuss this particular item.

The Roza powerplant is an integral part of the Roza division of the Yakima project. In a letter to me dated January 26, the Commissioner of Reclamation, Mr. Dexheimer, states that "the transmission lines to the irrigation pumps and the switchyards have been completed at the cost of $903,148 and at present are being energized with power purchased from the Bonneville Power Administration. All that remains of the planned electrical features to be completed is the 11,250-kilowatt Roza powerplant, at an estimated cost of $2,913,000. To date $60,689 has been expended in preliminary planning for the Roza powerplant.

"In the construction of the main canal, the United States invested $1 million in excess Roza Canal capacity for the purpose of providing a water supply for the Roza powerplant."

Thus we see, Mr. Chairman, plans for this important feature of the Roza project have been in the program from the beginning and that substantial sums of money have already been expended. About two-thirds of the power to be generated at the site will be consumed for pumping purposes by farmers on the project. The remainder will be sold commercially through the Bonneville grid system.

The irrigators on the project have a twofold interest in immediate completion of this plant. First, it was contemplated that power would pay about $1,137,000 out of the estimated cost of the total project. Second, it is estimated that the cost of pumping power from the Roza plant will be about 2.7 mills. The farmers are now paying about 3.37 mills. Thus, there will be a saving to them in pumping power costs of about 0.6 mill, when the power from the Roza plant gets on the line. This is approximately 20 percent less than their present power cost.

The Federal Government is interested because, as I said earlier, we have already spent $1 million to provide canal capacity for the powerplant. In addition, we have invested about $900,000 in the transmission lines and switchyards. Furthermore, there is over $1 million of the irrigation cost to be returned out of power revenues. The sooner we get the plant completed and get the power on the line, the sooner expenditures already made will be returned to the Treasury.

There is one additional development which argues persuasively for an immediate appropriation of funds. This year the Department of the Interior and the Roza Irrigation District signed an amendatory repayment contract. Section 8 of the contracts states—and I quote—"The United States will undertake to complete the construction of the Roza powerplant." Completion of the plant, therefore, becomes a solid obligation of the United States and I argue that we should proceed forthwith to discharge that obligation.

The last budget submitted by the Truman administration contained an item of $778,000 to start the initial construction. This was deleted in the House, as I recall it, because the budget of the new administration did not recommend the item. In subsequent years no recommendation has been made. I do not believe, however, this should be a deterrent to this committee.

I am informed, Mr. Chairman, that an appropriation of $400,000 or $500,000 will be sufficient to get the powerplant underway.

To summarize, the Roza powerplant is and always has been an integral part of the Roza project. The Federal Government has already invested over $1,900,000 in features essential to the installation of the generating capacity. A part of the project costs are to be repaid out of power revenues. The cost of power for pumping purposes will be reduced when the powerplant is in operation. The Government of the United States is bound by solemn contract to complete the installation. In my judgment, therefore, the committee should appropriate $400,000 to $500,000 to get the work underway.

Chairman HAYDEN. Have you any further comments you wish to make on construction before we go into operation and maintenance?

Mr. DEXHEIMER. With the exception of the construction funds for the Trinity project, conditional on its reauthorization, I have no further comments.

Chairman HAYDEN. What you would like to have this committee do is practically what the House did, conditioned it upon its reauthorization?

Mr. DEXHEIMER. What the House committee did, before it was eliminated by a vote of the House as a whole last night; yes, sir.

Chairman HAYDEN. In other words, you would like a statement in our report similar to the one in the House report?

Mr. DEXHEIMER. Yes, sir.

I would like, Senator Hayden, also to emphasize again that $415,000 in the Missouri Basin investigation was added by the amendments that we referred to earlier.

Chairman HAYDEN. Then we will just simply consider that as a budget estimate, because that is what it was, a reallocation of the budget estimate on the Missouri River Basin project.

Mr. DEXHEIMER. Yes, sir. We just wanted to be clear on the record how that stood.

OPERATION AND MAINTENANCE

Chairman HAYDEN. The House made a reduction of $500,000 in the estimate for operation and maintenance. The appropriation last year was $21,500,000; the budget estimate was $24 million for 1956 and the House committee allowed $23.5 million. Your formal amendment will be included in the record.

(The information referred to follows:)

BUREAU OF RECLAMATION

OPERATION AND MAINTENANCE

(House hearings, central section, pt. 1, pp. 411, 466, and 504; western section, pt. 1, pp. 57, 109, 154, 269, and 417)

Appropriation 1955	$21,500,000
Estimate	24,000,000
House allowance	23,500,000
Restoration requested	500,000

(P. 11, line 20)

Amendment requested:

(1) Page 11, line 20 strike out "$23,500,000" and insert in lieu thereof "$24,000,000"—the estimate, or an increase of $500,000 in the appropriation.

(2) Page 11, line 20 strike out "$19,912,000" and insert in lieu thereof "$20,411,600"—an increase of $499,600 in the appropriation.

HOUSE REPORT

"Appropriation 1955	$21,500,000
"Estimate 1956	24,000,000
"Recommended 1956	23,500,000

"Comparison:

"Appropriations 1955	+2,000,000
"Estimate 1956	−500,000

"Despite the committees of the Congress repeatedly insisting that the Bureau carry out the originally contemplated procedure with reference to operation and maintenance of irrigation projects by local interests, little, if any effective action

has been taken. The committee is at a loss to understand this reluctance on the part of the Bureau. In the absence of more positive action on the part of the agency, it can only be assumed that such inactivity in this regard results either from a desire of the Bureau to perpetuate itself as a Federal bureaucracy maintaining wholly unjustified control over local projects or a reluctance on the part of the local water users to assume their proper responsibilities. Such lethargy on the part of those responsible for this phase of the reclamation program leaves the committee with no alternative but to reduce the funds requested for operation and maintenance with the sincere hope that it will force the prompt assumption of proper responsibilities by local water users and the Bureau in this program."

JUSTIFICATION

Explanation of amendment (1).—The amendment restores the $500,000 reduction made by the House in the budget estimate. This amount is for the following activity:

Activity:	
Operation and maintenance:	
Appropriation, 1955	[1] $21,424,375
Budget estimate, 1956	24,000,000
House allowance, 1956	23,500,000
Restoration requested	500,000

[1] Excludes $75,625 transferred to "Salaries and expenses, Office of the Solicitor, Interior," pursuant to Public Law 465.

A breakdown of the restoration request by objects of expenditure follows:

01	Personal services	$306,000
02	Travel	6,000
03	Transportation of things	2,500
04	Communication services	4,000
05	Rents and utility services	5,000
06	Printing and reproduction	500
07	Other contractual services	91,000
	Services performed by other agencies	2,000
08	Supplies and materials	58,500
09	Equipment	16,500
10	Lands and structures	16,000
15	Taxes and assessments	1,000
	Subtotal	509,000
	Deduct charges for quarters and subsistence	9,000
	Total	500,000

In its report the House committee was highly critical of the Bureau with respect to the transfer of irrigation facilities to water user organizations for operation and maintenance. It was indicated that the committee had no alternative but to reduce the funds requested so as to force the prompt assumption of proper responsibility by local water users and the Bureau.

The portion of the appropriation request for operation and naintenance applicable to facilities serving irrigation activities totals $5,190,055. The House reduction applied to this amount reflects a cut of 9.6 percent. The appropriation request for irrigation facilities (excluding the share of multipurpose facilities serving irrigation) totals $3,711,490. The House reduction applied to this amount reflects a cut of 13.5 percent.

The reduction recommended by the House would require the complete elimination of all items of replacement and improvements to irrigation facilities amounting to $321,602 plus irrigation's share of all replacements and improvements to multipurpose facilities totaling $49,390 and in addition would require the reduction in water delivery service or maintenance in an amount of $129,008. The obvious result of this reduction is more costly operation of the facilities and the deferral of maintenance which will necessitate expensive rehabilitation programs in the future. It is the experience of the Bureau that inadequate maintenance of irrigation facilities is poor economy.

It is the continuing policy of the Bureau of Reclamation to transfer irrigation facilities to water user organizations as soon as they are able and willing to assume the responsibility. In reporting on the Bureau's request for operation and main-

tenance funds for fiscal year 1955, the House committee was critical and urged the Bureau to transfer irrigation facilities to water user organizations. Mindful of the views expressed by that committee, the Bureau vigorously urged the transfer of facilities on a number of projects. During the past year all or part of the irrigation facilities on the following projects have been transferred to water user organizations for operation, maintenance and care.

Deschutes project, north unit
Orland project
Gila project, irrigation blocks 1 and 2 of Wellton-Mohawk District
Klamath project, main division
Boise project, Payette Division
Vale project, Agency Valley Dam
Owyhee project, Owyhee Dam
Minidoka project, electrical distribution facilities, office buildings and storage yard
Missoula Valley, Big Flat unit
Central Valley project, Plainview Irrigation District

A total of 73 irrigation projects have been constructed or rehabilitated by the Bureau to furnish either a full or supplemental water supply for irrigation purposes. These projects are operated as follows:

Operated by water users	42
Operated by Bureau of Reclamation	5
Operated in part by water users and in part by Bureau	26
Total	73

Irrigation facilities operated by the Bureau include storage dams serving other purposes, projects under construction or in the development stage and on which irrigation districts have not been formed. In other instances the facilities provide service to a large number of irrigation districts, who are without a central organization capable of assuming the operation and maintenance responsibilities. A detailed project by project examination of the facilities operated by the Bureau shows that only a limited amount of additional facilities can be transferred for operation and maintenance by water user associations at the present time. Negotiations are under way for the transfer of these facilities and the Bureau will continue to vigorously pursue its policy of transferring irrigation facilities to water user organizations. However, in the meantime, it is essential that adequate funds be appropriated for the operation and maintenance of these facilities. Accordingly restoration of the full amount of the House cut of $500,000 is requested.

Explanation of amendment (2).—The amendment increases to $20,411,600 the amount to be derived from the reclamation fund. The restoration requested is in line with amendment (1).

RESTORATION OF HOUSE REDUCTION

Chairman HAYDEN. Will you tell the committee why you think it was necessary this reduction be restored?

Mr. DEXHEIMER. Mr. Dominy, head of my irrigation division, will reply to that, Senator.

Mr. DOMINY. That is correct, if the House action were to stand, the $500,000 reduction under the House language would be applied against the irrigation part of the operation and maintenance appropriation. Of the $24 million in the budget request, only $5,160,000 of that is for specific irrigation operation and maintenance. The balance is for power operation and maintenance, and for other items in the operation and maintenance budget, including soil and moisture projects, Colorado River front work and levee system, Boulder City, et cetera.

So the net effect of the House action would be to reduce the specific irrigation operation and maintenance allowance for 1956 by almost 10 percent. That would mean, Senator Hayden, that we would have to remove from our budget all of the replacement and improvement

items that we have in there, which amount to $321,602. We would have to remove $49,390 worth of multipurpose facilities replacements, which effect both power and irrigation, but this would be the irrigation's share of it, in amount of $49,390.

And we would have to actually reduce the operation of irrigation on our projects in an amount of $129,008.

Chairman HAYDEN. Let me see how you make up this original estimate for the money needed for operation and maintenance of irrigation facilities. My understanding is that you confer with the managers, part of the farmers of the Water Users Association, of the irrigation district, to determine what you can agree upon ought to be done in order to keep the canals and other things in shape so as to get water to the land.

Mr. DOMINY. That is right, Mr. Chairman.

Chairman HAYDEN. You agree on a figure of that kind, and then they agree on their part that if that amount of money is made available they will reimburse the United States for all that cost; is that correct?

Mr. DOMINY. That is right, sir. All of this irrigation operation and maintenance appropriation is returned to the Government in the year in which it is spent.

Chairman HAYDEN. Then a cut in this appropriation saves the American taxpayers nothing?

Mr. DOMINY. That is right. It merely reduces the amount of an outgoing appropriation and reduces by that same amount the amount you are going to get back.

Chairman HAYDEN. That is what I am getting at.

So that we have a thorough understanding that this is actually an authorization by Congress to approve what the water users on a project want done in order that they can get water on their land for the next year, and they are willing to pay for it; if that is understood, then there is no economy in making the cut as far as the taxpayer is concerned.

Mr. DOMINY. That is right.

Actually, I think the exact contrary is the case, because, as there is not enough money appropriated annually to properly maintain these facilities, it is going to be more expensive over the long pull. I think we know that from past experience, when we were slowed down during the war for lack of manpower and equipment; that we ended up in the need of rehabilitation of a lot of projects for lack of proper maintenance during those years.

Chairman HAYDEN. When you did not properly maintain the project year by year and it deteriorated, when we went back to put it in shape it actually cost more money; is that not correct?

Mr. DOMINY. That is right, sir. I cannot help but believe from the language that the House had in there about our not transferring works to the water users, that they had a misconception of the need for the total amount of that $24 million.

HOUSE COMMENT

Chairman HAYDEN. I would like to have your comment on this statement from the House committee report:

Despite the committees of the Congress repeatedly insisting that the Bureau carry out the originally contemplated procedure with reference to operation and

maintenance of irrigation projects by local interest, little, if any, effective action has been taken. The committee is at a loss to understand this reluctance on the part of the Bureau.

As a matter of fact, I would like to have you put in the record how many projects have been turned back for operation and maintenance, so that we do not have any money in this bill for them.

Mr. DOMINY. I have a full statement here, Senator, and with your permission we will put it into the record, which includes some tables giving that exact information.

Chairman HAYDEN. Very well, that may go into the record at this point.

(The information referred to follows:)

STATEMENT ON PROJECT OPERATION AND MAINTENANCE BY BUREAU OF RECLAMATION

The House Committee Report on the Public Works Appropriation Bill, 1956, makes the following statement:

"Despite the committees of the Congress repeatedly insisting that the Bureau carry out the originally contemplated procedure with reference to operation and maintenance of irrigation projects by local interests, little, if any, effective action has been taken. The committee is at a loss to understand this reluctance on the part of the Bureau. In the absence of more positive action on the part of the agency, it can only be assumed that such inactivity in this regard results either from a desire of the Bureau to perpetuate itself as a Federal bureaucracy maintaining wholly unjustified control over local projects or a reluctance on the part of the local water users to assume their proper responsibilities. Such lethargy on the part of those responsible for this phase of the reclamation program leaves the committee with no alternative but to reduce the funds requested for operation and maintenance with the sincere hope that it will force the prompt assumption of proper responsibilities by local water users and the Bureau in this program."

We most respectfully submit our activities during the past and particularly during the past year as an indication that the above statement is not a careful appraisal of the facts.

A total of 73 irrigation projects have been constructed or rehabilitated by the Bureau to furnish either a full or supplemental water supply. Of these projects 42 are fully operated by water users, 26 are operated in part by the water users and in part by the Bureau and only 5 wholly operated by the Bureau.

The 42 projects wholly operated by water users contain 1,521,123 acres. The 5 projects wholly operated by the Bureau contain only 409,400 acres of which 206,000 acres are in the Columbia Basin project.

There are 5,618,355 acres irrigable in those 26 projects which are operated in part by the Bureau and in part by the water users. But on 5,189,772 of these acres the Bureau simply maintains the supply works. The water users handle the distribution. Only on 428,583 acres does the Bureau handle the distribution of water. Thus the Bureau is directly concerned with delivery of water to only 11 percent of the land on all of its projects.

The details of project operation and maintenance are shown on the accompanying tables. The irrigable acreage is summarized in the table "Irrigable acreage served under projects constructed or rehabilitated by the Bureau of Reclamation to furnish either a full or supplemental water supply." The acreage under Bureau operated projects is shown in the table "Five projects operated entirely by the Bureau of Reclamation." The table "42 projects operated by water users" shows the projects and acreages in that category. A statement of the acreage supplied with water by water users and a brief summary of Bureau of Reclamation operated works are found in the table "26 projects operated in part by water users and in part by the Bureau of Reclamation."

The Bureau continues to operate, in most cases, the major and complex structures serving several water users' organizations. In cases where this is not true, as on the Mancos, Pine River, Sun River, Provo River, Rapid Valley, Umatilla, and Eden projects, the Bureau operates on funds advanced from water users. Carlsbad and W. C. Austin projects water users advance all funds except those required for flood-control operations.

Distribution systems are operated by the Bureau on only 13 projects. Of these, 11 are under construction or have been recently completed and have repayment

contract problems. Of the remaining 2, one, Yuma Auxiliary, is operated under advanced funds and the other, Rio Grande, a project faced with interstate and international complications, is also operated from advanced funds except for multipurpose reservoir operation serving both power and irrigation.

The record, therefore, rather than indicating a desire on the part of the Bureau to perpetuate itself, is in fact an indication to the contrary. The Bureau has long been mindful of the views expressed by the Congress in this matter and has vigorously urged the transfer of facilities. That it has been successful in the last year is again clearly shown by the record.

As of January 1, 1954, the Tucumcari project, New Mexico, was transferred to the Arch Hurley Conservancy District and the Malta and Glasgow divisions of the Milk River project were transferred to the Malta and Glasgow Irrigation Districts, respectively. Since that time all or part of the irrigation facilities of the north unit, Deschutes project, Orland project, irrigation blocks 1 and 2 of the Wellton-Mohawk division, Gila project, the main division of the Klamath project, the Payette division of the Boise project, Agency Valley Dam and Reservoir of the Vale project, the Owyhee Dam and Reservoir of the Owyhee project, certain electrical distribution facilities, office buildings, and storage yard to the Burley Irrigation District, Minidoka project, and the Big Flat unit of the Missoula Valley project have been transferred for operation and maintenance by the water users' organizations. In addition, we anticipate the early transfer of the Plain View Water District's distribution system, Central Valley project, for operation by the district.

The details of the Bureau's operation and maintenance budget, as submitted to the Congress, are shown in tables "Irrigation operation and maintenance, fiscal year 1956" and "Fiscal year 1956 appropriation request for operation and maintenance of irrigation facilities."

It is to be noted that at no time has there been question of the adequacy of the Bureau's estimates of cost for project operation and maintenance. Such estimates are based on long experience and are usually made with the knowledge that the water user, who pays the bill, is scrutinizing with considerable care every Bureau activity on his project. Deferred maintenance results in high cost operation and later requests for project rehabilitation.

Irrigable acreage served under projects constructed or rehabilitated by the Bureau of Reclamation to furnish either a full or supplemental irrigation water supply

Item	Irrigable acreage		
	Water-user operations	Bureau of Reclamation operations	Total
5 projects operated entirely by Bureau of Reclamation		409,400	409,400
42 projects operated entirely by water users	1,521,123		1,521,123
26 projects operated in part by water users and in part by Bureau of Reclamation	5,189,772	428,583	5,618,355
Total	6,710,895	837,983	7,548,878
Percent	89	11	100

5 projects operated entirely by the Bureau of Reclamation

Project:	*Acres, fiscal year 1956*
Rio Grande	173,460
Kendrick	16,475
Columbia Basin (acre-years)	206,000
Yuma auxiliary	3,384
Eden	10,081
Total 5 projects	409,400

42 projects operated by water users

State and project	*Irrigable acres*
Arizona: Salt River	337,077
California: Orland	19,431
Colorado:	
Fruitgrowers Dam	2,678
Grand Valley	43,715
Paonia	11,500
Uncompahgre	88,838
Idaho:	
Lewiston Orchards	3,524
Preston Bench	6,738
Montana:	
Bitterroot	16,665
Buffalo Rapids	24,716
Frenchtown	4,810
Huntley	34,347
Intake	881
Missoula Valley	977
Montana-North Dakota: Lower Yellowstone	57,735
Nebraska: Mirage Flats	11,657
Nevada:	
Humbolt	37,446
Newlands	70,511
Truckee Storage	29,366
New Mexico:	
Fort Summer	6,500
Tucumcari	42,214
Vermejo	----------
North Dakota: Buford-Trenton	9,461
Oregon:	
Arnold	4,248
Baker	7,312
Burnt River	15,291
Deschutes	99,259
Grants Pass	10,124
Ochoco	8,500
Vale	32,000
Oregon-Idaho: Owyhee	118,922
South Dakota: Belle Fourche	59,131
Texas: Balmorhea	10,608
Utah:	
Hyrum	6,693
Moon Lake	75,256
Newton	2,553
Ogden River	22,859
Sanpete	13,653
Scofield	15,609
Strawberry Valley	44,074
Weber River	108,898
Washington: Okanogan	5,346
Total, 42 projects	1,521,123

26 projects operated in part by water users and in part by Bureau of Reclamation

State	Project	Water users	Bureau of Reclamation
		Acres	
Arizona	Gila	32,185	81,073 acres.
	Yuma	51,936	14,639 acres.
Arizona-California-Nevada	Boulder Canyon	600,200	Hoover, Imperial Dams.
California	Cachuma	26,900	Cachuma Dam.
	Central Valley	858,907	Shasta, Friant, Folsom Dams; Friant-Kern, Delta Mendota, Madera Canals and Tracy pumping plant.
Colorado	Colorado-Big Thompson.	615,000	
	San Luis Valley	73,890	Platora Dam.
	Mancos	8,598	Jackson Gulch Dam.
	Pine River	47,284	Vallecito Dam.
Idaho-Oregon	Boise	356,261	Reserved works.
Idaho-Washington	Rathdrum Prairie	4,186	Funds advanced to Bureau to pay for pumping power.
Idaho-Wyoming	Minidoka	1,077,783	26,831 and reserved works.
Montana	Milk River	125,804	Sherburne and Fresno Dams.
	Sun River	94,910	Supervision only.
Nebraska-Wyoming	North Platte	357,404	Pathfinder, Guernsey Dams and Wheland diversion dam.
New Mexico	Carlsbad	25,055	Alamogordo Dam.
	Middle Rio Grande	84,900	
Oklahoma	W. C. Austin	47,810	Altus Reservoir.
Oregon	Umatilla	32,957	McKay and Wicklup Reservoir.
Oregon-California	Klamath	131,750	116,353 acres.
South Dakota	Rapid Valley	8,900	Deerfield Dam.
Utah	Provo River	46,609	Deer Creek Dam.
Washington	Yakima	376,858	Roza division; 72,185 acres.
Wyoming	Riverton	47,983	3d division distribution system; 13,326 acres.
	Shoshone	73,136	Heart Mountain division; 26,214 acres.
Various	Missouri River Basin	2,566	77,962 acres.
	Total, 26 projects	5,189,772	428,583 acres.

Irrigation operation and maintenance, fiscal year 1956

	Total irrigation allocation	Funds advanced	Appropriation request
Gila	$489,090	$43,090	$446,000
Yuma	335,430	81,430	254,000
Cachuma	9,760		9,760
Central Valley project	1,928,870		1,928,870
Kings River	800		800
Colorado-Big Thompson	139,700		139,700
San Luis Valley	7,200		7,200
Minidoka	355,000	96,000	259,000
Boise	38,450	15,000	23,450
Milk River	39,400	39,400	
North Platte	90,000	90,000	
Carlsbad	9,000	9,000	
Rio Grande	948,600	885,000	63,600
W. C. Austin	6,170	6,170	
Klamath	447,540	57,000	390,540
Columbia Basin	975,000		975,000
Yakima	398,600		398,600
Kendrick	39,000		39,000
Riverton	52,300		52,300
Shoshone	79,225	5,400	73,825
Missouri River Basin	128,410		128,410
Total	6,517,545	1,327,490	5,190,055
Projects financed entirely by advanced funds	118,560	118,560	
Total	6,636,105	1,446,050	5,190,055

Fiscal year 1956 appropriation request for operation and maintenance of irrigation facilities

Project	Irrigation's share of multipurpose expense					Direct irrigation expense							Total
	Storage	Carriage	Replacements and improvements	Primary pumping	Subtotal	Storage	Carriage	Primary pumping	Distribution	Drawing	Replacements and improvements	Subtotal	
Gila						$21,500	$249,000		$167,000	$8,100		$446,000	$446,000
Yuma							32,283		53,171	11,244	$157,302	254,000	254,000
Cachuma	$9,760				$9,760								9,760
Central Valley	367,000	$542,470	$24,000	$308,000	1,241,470		649,000				38,400	687,400	1,928,870
Kings River						800						800	800
Colorado-Big Thompson						28,000	22,000	$86,400			3,300	139,700	139,700
San Luis Valley	7,200				7,200								7,200
Minidoka	18,700		4,300		23,000	8,700		163,350	59,600	4,350		236,000	259,000
Boise	3,600	3,000	1,350		7,950	15,500						15,500	23,450
Rio Grande	47,600		16,000		63,600								63,600
Klamath	6,540		1,000		7,540	1,200			204,600	140,000	33,200	383,000	390,540
Columbia Basin						9,250	95,500	160,000	656,250	27,500	26,500	975,000	975,000
Yakima	77,600	23,500	500		101,600	600	66,500		180,800	5,100	44,000	297,000	398,600
Kendrick	1,500				1,500		14,000		13,000	9,000	1,500	37,500	39,000
Riverton						1,050	7,400		23,100	4,750	16,000	52,300	52,300
Shoshone	3,260		1,240		4,500	27,525			28,000	12,400	1,400	69,325	73,825
Missouri River Basin	9,445		1,000		10,445		89,105	1,600	25,920	1,340		117,965	128,410
Total	552,205	568,970	49,390	308,000	1,478,565	114,125	1,224,788	411,350	1,411,841	227,784	321,602	3,711,490	5,190,055

FACILITIES OPERATED BY BUREAU

Mr. DOMINY. I would like to summarize one figure for the committee's information here today. The Bureau of Reclamation is actually operating only 11 percent of the facilities that deliver water to irrigated land. Now, that includes these new projects still under construction, such as Columbia Basin and Central Valley and the Missouri Basin.

Chairman HAYDEN. Until a project is complete it would appear to me it would be wholly impractical to turn it over for operation and maintenance to the water users. On the other hand, in my judgment, when it is completed the quicker you turn it over to them the better.

Mr. DOMINY. We agree with that wholeheartedly, Senator. As a matter of fact, we provide for their taking over the operation and maintenance as soon as the development period has been completed, except for reserve works of a multiple-purpose nature and works which serve a large number of independent irrigation companies not intertwined under a common organization. Those works we feel we should continue to operate. But we try to get those over on advance funds, or, we get back the O. and M. in the year in which it is appropriated.

REDUCTION OF OPERATION AND MAINTENANCE FUNDS

Chairman HAYDEN. What puzzles me is this final remark in the House report:

> Such lethargy on the part of those responsible for this phase of the reclamation program leaves the committee with no alternative but to reduce the funds requested for operation and maintenance with the sincere hope that it will force the prompt assumption of proper responsibilities by local water users and the Bureau in this program.

How would cutting the amount of money for a particular project in North Dakota, or any other State, that had been determined upon as being needed, by agreement between the water users and the Reclamation Service as necessary—how would cutting down that amount of money induce the local organization to want to take it over? I do not quite follow the reasoning.

Mr. DEXHEIMER. I would like to comment on that whole language, if I might, Senator.

Chairman HAYDEN. Certainly.

Mr. DEXHEIMER. We have very strenuously insisted and provided in our contracts that the local people take over the management of the irrigation facilities. And in many cases, since I have been Commissioner, we have turned over parts of projects while they were still under construction.

Chairman HAYDEN. I understand how a unit could be turned over.

WELLTON-MOHAWK PROJECT

Mr. DEXHEIMER. As you well know, in the Wellton-Mohawk project the district is operating a part of that project while we are still building the other parts.

Chairman HAYDEN. That is right.

Mr. DEXHEIMER. We find that there are limitations beyond our control which is the reason we have not turned over every completed

project. And we are strenuously trying to eliminate those. Those limitations are similar to the Roza project, where the water users feel that the project is not complete and that they should not assume all of that operation and maintenance until the Roza powerplant is finished and they can take over the entire project.

Another example is in the Klamath Lake area in Oregon, where the ducks and the feeding grounds for them have interfered with our completion of the project to the point where the water users feel that they could take over and operate a project.

There is no lethargy on our part. We are very enthusiastically trying to carry out the spirit and the letter of turning these over just as quickly as possible. And we are pushing the water users to do the same and to set their organizations up so that they can.

Chairman HAYDEN. The first project in the United States that was turned over for operation and maintenance was the Salt River project in Arizona. That was done under a special act of Congress, authorizing it to be done, which I introduced. In all the years I have been here I have consistently urged that that plan be carried out, because it is the best way to handle a project. The management in Washington being at a great distance, it is not satisfactory. The farmers feel they are capable of taking care of their own business. Certainly Congress does not want to be bothered with matters of this kind unless it has to.

PROJECTS UNDER BUREAU CONTROL

Of this 11 percent that you mentioned that remains under the control of the Bureau of Reclamation, how many of those are uncompleted?

Mr. DOMINY. The Rio Grande project in New Mexico and Texas, on which the irrigation facilities are operated on advance funds and for which we do not need appropriated money but which we still operate because of the interstate character and certain international problems there with delivery of water to Mexico, is the biggest old project that we still operate. We have no immediate prospects for transferring it to the water users. But it is on an advance fund basis.

Then we have the Eden project in Wyoming which has been under construction for a while. Part of that is old plant. Nine thousand acres out of the 20,000 is actually the old irrigation district. But we are operating that during construction. We have every reason to believe we can transfer both the old and the new facilities to the irrigation district as soon as the construction is completed.

The Klamath project which the Commissioner has just mentioned, we have transferred recently to the Klamath Irrigation District the area in Oregon, but we have yet to complete our repayment arrangements with about 55,000 acres of the Klamath project in California, although some of it has had water for as much as 22 years. We hope to have that completed very soon, and in that contract there would be a provision for the water users to assume operation and maintenance.

So practically the entire 11 percent, Senator Hayden, where we are operating, is either reserve works, dams, and multiple-purpose features, or new projects, such as Columbia Basin and Central Valley.

OPERATION OF DREDGES ON COLORADO RIVER

Chairman HAYDEN. I would like to ask that if the $500,000 for operation and maintenance were restored, would any funds be available for operating a dredge on the Colorado River?

Mr. DEXHEIMER. No, sir; there would not.

Chairman HAYDEN. I think that is stated by representatives of the Bureau that it would require about $750,000 to operate the dredge. Is that correct?

Mr. DEXHEIMER. Yes, sir. Our estimate is $756,620.

Chairman HAYDEN. Senator Knowland was particularly interested in this matter because of the great effect on the town of Needles and otherwise in California. What is the necessity for renewing that operation?

CHANNELIZING RIVER AT NEEDLES

Mr. DEXHEIMER. It is to channelize the river through those critical areas where the sand has built up bars and during the high water tends to flood out communities such as Needles. And it eliminates a hazard, as well as some saving of water by not spreading it out.

Chairman HAYDEN. At Needles, where they have as high temperatures as anywhere in the United States and it is a dry area, it is easy to understand that if the river is spread out over a vast area, enormous quantities of water would be evaporated, whereas if it were channelized I assume there would be less evaporation.

Mr. DEXHEIMER. In addition to those hazards to the local people, there is a very definite need for maintaining the channel within its present bounds, so as not to lose the benefit of the work already done. As you know, that river, when it gets high, is apt to go most any place, and unless you do almost continual maintenance, it can divert from its channel and cause even greater damage to the work already completed.

JUSTIFICATION

Chairman HAYDEN. I would be obliged if you would include in the record a justification for resumption of work by this dredge.

Mr. DEXHEIMER. Yes, sir.

(The information referred to follows:)

COLORADO RIVER FRONT WORK AND LEVEE SYSTEM

In addition to the $491,000 in the budget estimate, $756,000 will be needed to resume full operation of the dredge *Colorado*, or a total of $1,247,000.

The proposed 1956 allocation to the Colorado River front work and levee system project as submitted to the Appropriation Committees of the Congress totals $491,000. This allocation assumes that Bureau activities in the Needles area will be confined to maintenance and some improvement of the existing channel. No new progress on channel rectification, which requires the use of the dredge *Colorado*, would be accomplished.

The reason for this proposal is that prosecution of channel rectification in an economic manner requires that the dredge be operated continuously or not at all. Any other system of dredge operation results in an immediate increase in the cost of the work accomplished. Thus, if the proposed channel rectification programs in the Needles and Blythe areas are to proceed at a reasonable rate, allocations of funds must be such as to operate the dredge over a period of a year on new work as well as maintaining that which has been done previously.

The estimated cost of a months operation of the dredge, based on labor costs as of November 19, 1954, is $54,110. The cost of disposing of dredged material for 1 month is $9,550. A schedule of 10 months dredging and disposal, 1 month

annual leave for labor and 1 month of major overhaul of the dredge, tugs, and appurtenant works in which the dredge and disposal crew will participate, will cost $661,620. This schedule will result in the excavation and disposal of about 3,700,000 cubic yards of material at an average cost of a little less than 18 cents per cubic yard.

The full years operation of the dredge will require supporting expenditures for right-of-way, for borrow for river banks, for minor levee fill by truck delivery, for levee shaping, levee surfacing, and for maintenance of access and service roads; all of which are estimated to cost approximately $95,000.

Thus, the estimated total cost of a years work on the full Colorado River channel rectification program would be equal to the cost of the present program, which is essentially maintenance, but high cost maintenance because of incompleted work, $491,000 plus dredge operation for 1 year at a cost of about $661,000 and the supporting work at a cost of $95,000 or a total of $1,247,000.

230-Kilovolt Line to Grand Island, Nebr.

Chairman HAYDEN. Have you given any thought to the construction of a 230 kilovolt line to Grand Island, Nebr., in lieu of the 115-kilovolt line that is now proposed to Neligh, Nebr.?

Mr. DEXHEIMER. Yes, sir. We did planning work on that and made an estimate of cost for a line from the Fort Randall substation to Grand Island, of 230-kilovolt capacity. Because of our allocation of power available within the Missouri Basin system to the State of Nebraska, it was determined that there was not a present need for a line of that capacity, and it would be at least some time in the future before we would be in a position to allocate sufficient power to Nebraska to justify that line.

Chairman HAYDEN. The House committee said:

> The committee has specifically deleted $940,000 programed for the proposed 115-kilovolt transmission line from Fort Randall Dam to Neligh, Nebr. The testimony received indicates that there is a question as to the need for an additional line at a future date to meet all of the power requirements of the Nebraska Public Service system. In view of this fact the committee believes that consideration should be given to the construction of a heavier line at this time instead of entering into the more expensive proposition of one 115-kilovolt line now and another later.

What is the difference in cost between the one 115 kilovolt line and the 230 kilovolt line?

Mr. DEXHEIMER. The 115 kilovolt line, of course, was only planned to go as far as Neligh, Nebr. The 230 kilovolt line that they are talking about would go to Grand Island, which is almost twice the distance.

I do not believe we have a figure—do we, Mr. Campbell—for two 115 kilovolt lines?

Mr. CAMPBELL. No, sir; we do not. As the Commissioner said, the $940,000 is for a much shorter line. Obviously, a second line of that same length would cost about the same amount of money. But the 230 kilovolt line suggested is a much longer line and reaching farther south into the State.

TOTAL COST

Chairman HAYDEN. How much does it cost all together?

Mr. CAMPBELL. Our estimate is that it would cost about $9,324,000.

Chairman HAYDEN. Do you mean 10 times as much?

Mr. CAMPBELL. The $940,000 is for fiscal year 1956 only. The total cost of the Neligh line is $1,375,000.

Chairman HAYDEN. I notice that Mr. Miller of Nebraska offered an amendment on the floor of the House to that effect and it was rejected. The amendment reads:

Provided further, That $9 million be appropriated to complete a 230 kilovolt transmission line from Fort Randall Dam, S. Dak., to Grand Island, Nebr.

Has that ever been contemplated at any time?

Mr. CAMPBELL. No, sir.

Chairman HAYDEN. Has that ever been a budget estimate?

Mr. CAMPBELL. Mr. Golze can answer that.

Mr. GOLZÉ. An estimate for the Grand Island line was submitted to the Bureau of the Budget for the fiscal year 1956.

DISTANCE INVOLVED

Senator THYE. Mr. Chairman, might I learn this: What is the distance, how many miles are involved here?

Mr. DEXHEIMER. The Fort Randall-Neligh line, 115-kilovolt line which we propose, plus the substation, would cost $1,375,000, total; of which $940,000 was requested in this year's budget request. The line would be 77 miles long.

Senator YOUNG. How much money did you say?

Mr. DEXHEIMER. $1,375,000 total, of which we are requesting $940,000 this fiscal year for the 115-kilovolt line.

Chairman HAYDEN. If you duplicated that line at some future time, if you ran a parallel 115-kilovolt line to it so that you would have a total capacity, then, of 230 kilovolts, that distance would cost us the same amount as this probably; would it?

Mr. DEXHEIMER. Yes, sir. So far as Neligh, it would cost approximately the same as this $1,375,000. But there is some distance—I do not have the mileage—from Neligh to Grand Island, which, of course, would cost considerably more.

Chairman HAYDEN. Evidently the cost is high because it runs to $9 million as compared to $900,000.

Mr. CAMPBELL. Senator, the $9 million line that you are referring to would be a steel tower line of a much higher voltage.

Senator THYE. And the distance would be how much?

Mr. CAMPBELL. I do not know, Senator.

Senator THYE. I think the distance would be an additional 60 miles. I think your first distance under the 115-kilovolt line is 77 miles. Am I right, or wrong?

Mr. DEXHEIMER. Yes; the first distance from Fort Randall to Neligh is 77 miles, Senator, and I think your estimate of 60 miles farther from Neligh to Grand Island is approximately right. So that we almost double the length of the line.

SUFFICIENCY OF CURRENT

Senator THYE. Have you sufficient current to utilize such a transmission system were it constructed?

Mr. DEXHEIMER. We are not able at this time to allocate to Nebraska sufficient power for a 230-kilovolt line.

Senator THYE. In other words, if the 230-kilovolt line was constructed, you would never use the maximum capacity of that transmission line; is that correct?

Mr. DEXHEIMER. No, sir; I do not believe that is quite correct.

Senator THYE. What is correct, then?

Mr. DEXHEIMER. It is altogether possible that if future additions to the Missouri River Basin power production become available, we could allocate sufficient power to Nebraska so that the full capacity of the 230-kilovolt line would be utilized.

Senator THYE. Would that require additional dam construction, or just the hydroelectric generating units within the construction that you now have?

I am having difficulty getting an understanding here as to whether there is any justification for the 230 and the extension in distance over and above what is proposed in the 115. You see, you have about $940,000 involved in the 115, and the 230 and the additional extension call for almost $10 million. I have just not been able to get out of the whole proposal here a sufficient justification of this increased cost and extension, because you do not have the current to transmit, and that you would have a line capacity standing, awaiting some future development, subject to deterioration and weather hazards and all that goes into the hazard factor of a transmission line.

Mr. DEXHEIMER. Senator Thye, it is not a question of the power available. There would be power available from the presently planned installations in the Missouri Basin, but it is a question of whether that power, as it is developed in the future, under present plans, would be allocated to the State of Nebraska.

Senator THYE. If you could allocate unrestricted to Nebraska, you have the capacity. But there are others that are justly entitled to some consideration along the Missouri River; is that the answer?

Mr. DEXHEIMER. That is correct. And the Interior Department, in its review of the allocations in the Missouri River Basin, decided and changed the proposal there, on the basis of what they thought should be the future allocations of power to Nebraska.

Senator THYE. Suppose you were to construct the 230 and go the full distance that was contemplated; from how far up the Missouri River would you be drawing the generated current?

Mr. DEXHEIMER. That is all pooled in a general system within a loop, and actually the current would be taken out of that system at Fort Randall, which would be the 77 plus the 60.

Senator THYE. But Gavins Point would not generate all of that, would it?

Mr. DEXHEIMER. No, sir; but it might at times be generating part of it.

Senator THYE. You would have to draw it from clear up to Randall and possibly further up, would you not?

Mr. DEXHEIMER. With this pooled operation, of course, wherever the water is available at the time and the power is needed, that is where the power is generated.

Senator THYE. But would that deny South Dakota what its needs might be?

Mr. DEXHEIMER. No, sir.

Senator THYE. Would it deny Minnesota what its needs might be?

Mr. DEXHEIMER. There again we come against this very delicate problem of how you are going to allocate power when there is not

ALLOCATION OF POWER

enough to go around to the preference customers that you are trying to serve.

Senator THYE. Exactly. In other words what is involved in the requested transmission down into Nebraska is that it would positively jeopardize the drawing off up in the regions of North Dakota and Minnesota; would it not?

Mr. DEXHEIMER. "Jeopardize" might not be the right word, Senator. It is a question of how much of their anticipated needs you would be able to furnish.

Senator THYE. Then let me ask one final question: What percent of your entire generated capacity would this installation, if you put in the 230, demand in order to make use of the transmission line to the capacity of 230? What percent of your total output from Garrison, from Randall, from Gavins Point?

Mr. DEXHEIMER. There, Senator, of course you would have to pin it down to a specific year as to how much generation you would have.

Senator THYE. Anticipated rainfall, et cetera?

Mr. DEXHEIMER. Yes, sir. It would be difficult to answer that.

Senator THYE. You are guessing; however, you have a pretty fair knowledge of what your average would be and what your anticipated output annually would be, do you not?

Mr. DEXHEIMER. We have forecasts on that; yes, sir.

Senator THYE. Yes, sir, I think so.

Mr. DEXHEIMER. Because that is our means of entering into contracts.

Senator THYE. Would you dare to venture a guess of what percentage of your forecast that 230 would pull?

Mr. DEXHEIMER. I would not like to at this time, Senator, because I do not have those figures available.

Senator THYE. We have once in a while been treated a little bit rough over on the House side from the standpoint of what we were endeavoring to do over there at Granite Falls, and I have to be equally rough when you start talking about these Nebraska and the 230, and I am serving notice right now.

Mr. DEXHEIMER. I think, Senator, that that allocation was the primary reason why the department decided on the 115 kilovolt line rather than the 230.

Senator THYE. Thank you, Mr. Chairman. I regret I took so much time.

PRIORITY OF DEFENSE INSTALLATIONS

Senator YOUNG. Let me ask one question at this point. Supposing the Federal Government decided to put in a defense installation, say, an aluminum plant, somewhere along in the upper reaches of the Missouri Basin; would not such an installaiton have priority over the interests of the South on power generated by the various dams?

Mr. DEXHEIMER. No, sir. Under the law our priority customers are well defined. I believe that an industry, as they are in the Bonneville Administration area, would be subject to interruption.

Senator YOUNG. If it was a federally sponsored installation, for defense purposes?

Mr. DEXHEIMER. Yes, sir. I think originally, aluminum plants in the Columbia Basin area were sponsored by defense production.

But those industrial contracts are subject to interruption in case of water shortages or power shortages to serve other customers.

Chairman HAYDEN. I am sure you are right about that Bonneville testimony. Again, in Arkansas, the power that was supposed to be consumed within the State was diverted to an aluminum plant; but we built another dam to make up for it. That is the reason why appropriation was made for Table Rock Dam, to make up for the loss of power that went to that aluminum plant from the Bull Shoals Dam.

GENERAL ADMINISTRATIVE EXPENSES

I would like to ask you one more question; that is about your administrative expenses. The House appropriated $3.5 million and the Budget estimate was $3.7 million, which means a cut of $200,000. But in view of the fact that the House has now authorized more work to be done, it would seem to me that it would be necessary to restore the Budget estimate for administrative expenses. I do not see how you can administer the whole job with the same amount of money with which you were expected by the House to administer a lesser job.

Your formal amendment will be included in the record.

(The information referred to follows:)

BUREAU OF RECLAMATION

GENERAL ADMINISTRATION EXPENSES

(House hearings, general section, pp. 138–142 and 173–174)

Appropriation, 1955	$4,000,000
Estimate	3,700,000
House allowance	3,500,000
Restoration requested	200,000

(P. 12, line 12)

Amendment requested:

Page 12, line 12 strike out "$3,500,000" and insert in lieu thereof "$3,700,000", the estimate, or an increase of $200,000 in the appropriation.

HOUSE REPORT

Appropriations, 1955	$4,000,000
Estimate, 1956	3,700,000
Recommended, 1956	3,500,000
Comparison:	
Appropriations, 1955	−500,000
Estimates, 1956	−200,000

"While some reduction has been achieved by the Bureau in its general administrative expenses, the committee believes that a vigorous and more realistic application of the recommendations of the report of the Secretary's survey team on the Bureau of Reclamation will result in further reductions."

JUSTIFICATION

This amendment restores the $200,000 reduction made by the House in the budget estimate. This amount is for the following activity:

Activity	Appropriation, 1955	Budget estimate, 1956	House allowance	Restoration requested
General administration:				
Departmental and Denver offices	$2,035,879	$2,038,000	$2,038,000	
Regional offices	1,580,000	1,662,000	1,462,000	$200,000
Total	[1]3,615,879	3,700,000	3,500,000	200,000

[1] Excludes $384,121 transferred to "Salaries and expenses, Office of the Solicitor, Interior," pursuant to Public Law 465.

A breakdown of the restoration, by objects, of expenditures follows:

01	Personal services	$172,000
02	Travel	10,100
03	Transportation of things	700
04	Communication services	3,800
05	Rents and utility services	700
06	Printing and reproduction	1,200
07	Other contractual services	6,600
	Services performed by other agencies	1,700
08	Supplies and materials	1,900
09	Equipment	1,100
15	Taxes and assessments	200
	Total	200,000

The Bureau is requesting $3,700,000 to finance its general administrative expenses during fiscal year 1956. While this is an increase of $84,121 over the amount available for the current year after transfer of $384,121 to the Solicitor's Office explained below, it is $800,000 less than was appropriated for fiscal year 1954. The $384,121 transferred to the Solicitor's Office from this appropriation in 1955 included an overestimate in the amount of $85,315, which, due to technical wording in the appropriation act and supporting committee report had to be transferred. The appropriation requested for fiscal year 1956 is intended to restore the general administrative expenses appropriation to the level intended for fiscal year 1955.

The 1956 estimate fully accounts for the savings made possible by the survey team reports. A reduction of $200,000 below the Budget Bureau-approved estimate as contemplated by the House allowance would be a serious handicap to the management and direction of the Bureau's programs since the Bureau's administrative organization has been cut to a minimum consistent with workload. In 1956 greater administrative burdens, due to more paperwork in the accounting and fiscal operations, more extensive direction of field programs and public relations in general will have to be absorbed by the present staff.

The general administrative expenses appropriation is used for work of a general supervisory nature including those costs which cannot properly be charged to a project. Among such activities as fall within this category are the functions of the Washington office, functions of part of the Commissioner's office in Denver and certain general functions of the seven regional offices. The type of activities financed with these funds are general supervision of the extensive physical facilities of the Bureau including the negotiations of repayment contracts and activities associated with the development of basinwide water and power resources including coordinating the Bureau's functions with other Government agencies, and private interests and the overall direction of the reclamation program.

Mr. DEXHEIMER. We hope that $200,000 can be restored. Even with that, we have never felt that we had enough money in our general administrative expenses to carry on the functions which we must do which cannot properly be charged to any specific project. And we have tried repeatedly to get more money into our general administrative fund to carry on those things which we cannot properly charge to a project.

BUDGET ALLOWANCE

Chairman HAYDEN. The Budget allowed you $3.7 million. What did you ask the Budget for?

Mr. DEXHEIMER. We asked for $4.5 million, Senator.

Chairman HAYDEN. So that you would at least like to have this amount of money restored?

Mr. DEXHEIMER. We have more and more work which comes under the category of nonproject expense. And we have done, I think, a herculean job of cutting down on our personnel charged to that as recommended by our survey team report. My personal office has

been cut over 30 percent, and we are saving everything that we possibly can. I feel that any help that we can get for more funds would be very beneficial.

Chairman HAYDEN. Thank you very much for your statement.

SOUTHWESTERN POWER ADMINISTRATION

STATEMENTS OF FRED G. AANDAHL, ASSISTANT SECRETARY FOR WATER AND POWER, ACCOMPANIED BY DOUGLAS G. WRIGHT, ADMINISTRATOR, SOUTHWESTERN POWER ADMINISTRATION

Chairman HAYDEN. Now, Mr. Aandahl, we will be glad to hear from you on the Southwestern Power Administration. The formal amendments will be included in the record.

(The amendments and justification referred to follow:)

OFFICE OF THE SECRETARY

OPERATION AND MAINTENANCE, SOUTHWESTERN POWER ADMINISTRATION

(House hearings, central section, pt. 2, pp. 1–115)

Appropriation, 1955	$2, 165, 000
Estimate	1, 134, 000
House allowance	684, 000
Restoration requested	1, 250, 000

(P. 7, line 11)

Amendment requested:

Page 7, line 11, strike out "$684,000" and insert in lieu thereof "$1,934,000", an increase of $1,250,000 in the appropriation and an increase of $800,000 above the estimate.

HOUSE REPORT

"A reduction of $450,000 below the budget estimate of $1,134,000 has been made by the committee. This reduction represents the amount budgeted for purchase of energy and the payment of wheeling charges under existing contracts with private utility companies and cooperatives in the area. Funds for this purpose have been made available through reactivation of the continuing fund discussed in the following paragraphs."

JUSTIFICATION

The amendment restores the reduction of $450,000 made by the House for the purchase of energy and payment of wheeling charges. The amendment also proposes an increase of $800,000 above the budget estimate to carry on interim contracts with generating and transmission cooperatives for the purchase of a limited amount of steam-generated energy and payment of wheeling charges.

The amount of the restoration is distributed to the applicable activity as follows:

Activity	Appropriation, 1955	Budget estimate, 1956	House allowance, 1956	Restoration requested
System operation and maintenance	$355, 000	$425, 000	$425, 000	
Purchase of energy and wheeling charges	1, 140, 000	450, 000		$1, 250, 000
Power contracts and rates	30, 000	55, 000	55, 000	
General administration	240, 000	204, 000	204, 000	
Total	[1] 1, 765, 000	1, 134, 000	684, 000	1, 250, 000

[1] Includes $61,500 transferred to "Salaries and expenses, Office of the Solicitor."

The restoration requested would be expended under object classification "07 other contractual services."

The additional $1,250,000 requested to be appropriated will allow for continuation of power disposal by the administration. It would provide for further extension of interim contracts to cover a period during which negotiations could continue looking toward integration arrangements between the generating and transmission cooperatives, private utilities, and the Southwestern Power Administration. These negotiations have been underway for 2 years and there is every reason to believe that, if continued, effective arrangements can be reached.

The Department has been unable to make detailed studies on the effect that a reactivation of contracts would have on the power rates of the administration. There is now pending before the Federal Power Commission a new rate schedule which proposes a charge of 7.16 mills to direct customers of the administration and a charge of 7.33 mills to those customers who buy peaking power and make their own provision for its integration with steam and the development of a load factor that is usable by the customer. We do know that if we are to meet the requirements of section 5 of the Flood Control Act of 1944 insofar as repayment is concerned, a further increase in rates would be required if the inoperative contracts with the generating and transmission cooperatives are to be made active.

OFFICE OF THE SECRETARY

SOUTHWESTERN POWER ADMINISTRATION CONTINUING FUND

(House hearings, central section, part 2, pp. 1–115)

Appropriation 1955	
Estimate	
House allowance	$6,000,000
Restoration requested	−6,000,000

(p. 7, lines 12 through 17)

Amendment requested:

Page 7, lines 12 through 17, strike out the following:

"CONTINUING FUND, SOUTHWESTERN POWER ADMINISTRATION

"Not to exceed $6 million shall be available during the current fiscal year from the continuing fund for all costs in connection with the purchase of electric power and energy, and rentals for the use of transmission facilities."

HOUSE REPORT

"The continuing fund language has been inserted in the bill in the same manner in which it last appeared in the appropriation bill for the Department of the Interior for the fiscal year 1953. It provides that the SPA shall have authority to use power sales revenues, subject to an annual limitation placed in the appropriation bill, to pay for emergency expenditures, purchase of electric power and energy, and rentals for the use of transmission facilities. This action makes it possible to reactivate valid and legal contracts which certain G. and T. (generating and transmission) cooperatives have with SPA. These contracts at their inception were examined by the Congress and funds were available to carry them out through the continuing fund for fiscal years 1950 through 1953.

"The contracts in question have been tested in the courts. Ten private utility companies filed suit, attacking the legality of the contracts, in the United States District Court for the District of Columbia. The district court handed down an opinion on June 17, 1953, upholding the legality of the contracts. The companies appealed this decision. The Court of Appeals for the District of Columbia on April 28, 1955, held that the companies had no standing to sue and directed the district court to dismiss the companies' suit.

"The G. and T. cooperatives originally borrowed approximately $70 million from the Rural Electrification Administration for construction of system facilities on the security of their contracts with the Southwestern Power Administration. Operation of these contracts was suspended during the past 2 years because of action of the Congress in withholding the use of the continuing fund to implement them. This action placed the G. and T. cooperatives in a precarious financial situation for which relief has been sought through negotiations with private utilities in the area looking to integration of the G. and T. systems with the

systems of the companies. These negotiations have not as yet resulted in contracts which would provide the G. and T.'s with necessary income from their several powerplants and facilities in order to retire the REA loans.

"In reactivating the contracts with the G. and T. cooperatives, the Department of the Interior is instructed to delete any provisions providing for the option to purchase G. and T. transmission lines or other facilities by the Southwestern Power Administration. The contracts are also to provide: (1) that the G. and T. cooperatives will operate and maintain their own transmission systems under lease to the SPA; (2) that the SPA and the G. and T. cooperatives will settle accounts for power purchased and sold on the basis of net-balances as is done under existing contracts to which SPA and private utilities are parties; and (3) that power and energy will be delivered to the load centers of all G. and T. contracting systems at the basic SPA rate.

"The Department is also instructed to provide for the recapture for the use of preference customers all power and energy to which they are entitled under the provision of section 5 of the Flood Control Act of 1944, and to negotiate as soon as possible a settlement with each contracting G. and T. cooperative effective as of the date of the passage of the bill.

"The amounts provided in the bill for both operation and maintenance and the continuing fund are based on information at hand. However, since there was considerable variation in the informal estimates offered during the hear ngs as to SPA costs under the reactivated contracts and since the nature of the amendments to the contracts could affect the amounts required, it is recognized that some adjustment may be necessary at a later date."

JUSTIFICATION

The amendment proposes deletion of language from the appropriation text which would make available $6 million in the continuing fund for the purchase of electric power and energy, and rentals for the use of transmission facilities. As expressed in the House report, the purpose of the language is to reactivate contracts between generating and transmission cooperatives and the Southwestern Power Administration with certain modifications.

During the past 2 years the cooperatives and private utilities and the Southwestern Power Administration have been engaged in negotiations to arrive at contractual arrangements which would replace presently inoperative contracts between Southwestern and the cooperatives. These negotiations are reaching a point where it should be possible for all parties to agree on an effective replacement contract. Reconstitution of the inoperative contracts would have the effect of stopping all efforts to arrive at alternative means for the integration of the power systems and the interchange of power.

CONTINUING FUND

Chairman HAYDEN. First, let me state that the House bill includes $6 million in the continuing fund, a major portion of which is for the purpose of implementing the existing contracts for the lease of facilities and purchase of power between the Southwestern Power Administration and the G. & T. cooperatives. I understand that the Department is requesting that the continuing fund be stricken from the bill and that $800,000 over the budget estimate be allowed for the purpose of continuing the interim contracts.

A very important aspect of this matter is the recent decision, rendered April 28, of the United States Court of Appeals for the District of Columbia Circuit in the case of *Kansas City Power & Light Co., et al.* v. *Douglas McKay, Secretary of the Interior, et al.*

In view of this decision, we must proceed on a basis that these contracts are legal and valid, with one exception. The Supreme Court of Arkansas in the decision of *Arkansas Electric Cooperative Corp.* v. *Arkansas-Missouri Power Co., et al.*, held that a contract similar to these under consideration was invalid under Arkansas law dealing with REA cooperatives, and there was some discussion of the

authority of the Federal Government to enter into such a contract under section 5 of the Flood Control Act. However, it must be noted that this was a State court decision.

I will include in the record a copy of the Kansas City Power & Light decision.

(The decision referred to follows:)

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 12067

KANSAS CITY POWER & LIGHT COMPANY, ET AL., appellants, *v.* DOUGLAS MCKAY, SECRETARY OF THE INTERIOR, ET AL., appellees

Appeal from the United States District Court for the District of Columbia

DECIDED APRIL 28, 1955

Mr. Raymond T. Jackson, of the bar of the Supreme Court of Ohio, *pro hac vice*, by special leave of Court, and *Mr. Richard L. Arnold*, with whom *Messrs. E. Fontaine Broun* and *Henry T. Rathbun* were on the brief, for appellants.

Mr. Morton Liftin, of the bar of the Supreme Court of New York, *pro hac vice*, by special leave of Court, with whom *Messrs. Leo A. Rover*, United States Attorney, *Paul A. Sweeney*, Attorney, Department of Justice, and *Theodore H. Haas*, Attorney, Department of the Interior, were on the brief for appellees. *Messrs. Lewis A. Carroll* and *Samuel L'Hommedieu*, Assistant United States Attorneys, entered appearances for appellees.

Mr. William C. Wise filed a brief on behalf of N. W. Electric Power Cooperative, Inc., et al., as *amici curiae*, urging affirmance.

Before PRETTYMAN, BAZELON and WASHINGTON, Circuit Judges.

WASHINGTON, *Circuit Judge:* This case involves the question whether utility companies which claim they are in competition with a federally-supported power program can obtain the aid of the courts in challenging the validity of that program.

Plaintiffs-appellants, electric utility companies operating in Kansas, Missouri and Arkansas, ask for relief under the Declaratory Judgment Act, 28 U. S. C. §§ 2201–2 (1952), against the Secretaries of the Interior, Agriculture and the Treasury and the Administrators of the Southwestern Power Administration ("SPA") and of the Rural Electrification Administration ("REA") as defendants: (1) enjoining them from lending or disbursing funds of the United States to SPA or to certain federated power cooperatives for the construction by the latter of electric generating and transmission facilities and for the sale and purchase of electric power to and from them by SPA; (2) enjoining them from doing anything in furtherance of an alleged plan by which SPA would in effect construct and acquire control of these generating and transmission facilities contrary to law; and (3) declaring that they have no right, power or authority to carry out the alleged plan.

Defendants moved to dismiss the complaint for the reason, among others, that plaintiffs did not have the capacity, and did not show any injury or interest entitling them, to maintain the suit. The District Court denied the motion to dismiss on the ground that the instant case does not fall within the rule of *Alabama Power Co.* v. *Ickes*, 302 U. S. 464 (1938). Thereafter, upon trial of the issue of the legality of the loan contracts and lease agreements entered into by the defendants, the District Court held that those contracts and agreements were valid and authorized by the Rural Electrification Act and the Flood Control Act of 1944, respectively. From the final judgment for the defendants the plaintiffs, other than Missouri Edison Company, have appealed.

Defendants SPA and REA have made contracts with five federated cooperatives,[1] including Northwest Electric Power Cooperative, Inc. ("Northwest"). The contracts with Northwest, which are substantially the same as the contracts with the others, will be summarized. The Government, acting through REA, for "the purpose of furnishing electric energy to persons not receiving central station electric service" has agreed to lend Northwest money for the construction

[1] Northwest Electric Power Cooperative, Inc. ("Northwest"); KAMO Electric Cooperative, Inc. ("KAMO"); Central Electric Power Cooperative ("Central"); Sho-me Power Corporation ("Sho-me"); and M. & A. Electric Power Cooperative ("M. & A.").

of an electric generating plant and transmission lines, substation, transformers and related facilities in certain described rural areas. Northwest is obligated to repay the loan within 35 years, which the revenue derived from the sale of the newly-created power output will enable it to do. Under a separate agreement with SPA, Northwest is to construct a transmission line from the Government-owned Bull Shoals Reservoir in Arkansas to the proposed generating plant, and is to lease the line to SPA for a period of 40 years, with an option to purchase. Northwest also agrees to sell to SPA the power output of the new generating plant and SPA in turn will supply Northwest at a single delivery point with its power requirements. In case SPA cannot furnish all the power needed by Northwest, the latter may buy additional power from any available source.

Plaintiffs are electric power utilities, supplying electric service to a large number of customers in Missouri, Kansas and Arkansas, including rural electric distribution cooperatives to whom central station service is rendered. None of them has exclusive franchises to supply electric power. They have programs, in various stages of planning or execution, to expand their facilities to meet estimated increases in demand for electric energy from all of these consumers and customers. They claim that the contractual arrangements made by REA and SPA with the federated cooperatives will thwart their plans and duplicate their facilities (existing, under construction, or authorized), which are or will be available to serve the federated cooperatives' demand for central station service. They contend that the contracts violate the loan standards of the Rural Electrification Act of 1936;[2] that SPA's power rates are uneconomical, and that the congressionally-imposed restrictions on SPA's activities have been violated, contrary to the provisions of the Flood Control Act of 1944;[3] that the contracts enable the federated cooperatives to engage in destructive federally-subsidized competition with plaintiffs; and that the defendants (other than the Secretary of the Treasury) are misusing the lending powers of REA to obtain for SPA control or ownership of the large steam generating plants and transmission lines built by the federated cooperatives, contrary to the intent of Congress, the Constitution and the laws above referred to.

It is indisputable that the essence of plaintiffs' complaint is the competition which they will suffer if the Government's contracts are carried out. They can claim no other interest or injury. The defendants have not undertaken to regulate them in any way. They have not been ordered to abandon any of their activities or to forego the expansion programs planned by them. They have not been subjected to any obligation or duty. Their sole interest and objective is to eliminate the competition which they fear. Controlling decisions of the Supreme Court, dealing with other electric power contracts of the Federal Government, establish that an interest of this kind is not sufficient to enable them to sue to enjoin execution of the power contracts and program of the Government. See *Alabama Power Co.* v. *Ickes*, 302 U. S. 464 (1938); *Duke Power Co.* v. *Greenwood County*, 302 U. S. 485 (1938); *Tennessee Power Co.* v. *T. V. A.*, 306 U. S. 118 (1939).

In the *Alabama Power* case, suit was brought to enjoin the execution of contracts for the lending and grant of money to certain cities for the construction of municipal electric distribution systems, on the ground in part that the contracts were not authorized by statute. It was contended that such contracts would establish rival and competing plants resulting in loss of business to the plaintiff. The Supreme Court, affirming this court, took the view that the power company was without standing to challenge the validity of the contracts by suit. The Court stated:

"The only pertinent inquiry, then, is what enforcible legal right of petitioner do the alleged wrongful agreements invade or threaten? If conspiracy or fraud or malice or coercion were involved a different case would be presented, but in

[2] Under the Rural Electrification Act, 7 U. S. C. §§ 901 *et seq.* (1952), the Administrator of the REA is empowered to make loans to cooperative associations for the purpose of "financing the construction and operation of generating plants, electric transmission and distribution lines or systems for the furnishing of electric energy to persons in rural areas who are not receiving central station service." 7 U. S. C. § 904 (1952). Such loans may not extend beyond 35 years and carry interest at 2 per cent. 7 U. S. C. §§ 903 (a), 904 (1952).

[3] This Act, 33 U. S. C. §§ 701-1 *et seq.*, 16 U. S. C. §§ 825s *et seq.* (1952), authorizes the Secretary of the Army to engage in flood control work and to improve navigation through reservoir or other projects. Section 5 (16 U. S. C. § 825s) directs that electric energy and power generated at reservoir projects under Army control and not required in their operation shall be delivered to the Secretary of the Interior for transmission and disposal "in such manner as to encourage the most widespread use thereof at the lowest possible rates to consumers consistent with sound business principles, the rate schedules to become effective upon confirmation and approval by the Federal Power Commission." To effectuate such sales the Secretary of the Interior is authorized to construct, or acquire with funds appropriated by Congress, transmission lines and related facilities needed to make the power generated at the reservoirs available in wholesale quantities to various classes of purchasers including public bodies and cooperatives. The proceeds from the sales of such energy are to be paid into the general fund of the Treasury.

their absence, plainly enough, the *mere* consummation of the loans and grants will not constitute an actionable wrong. Nor will the subsequent application by the municipalities of the moneys derived therefrom give rise to an actionable wrong, since such application, being lawful, will invade no legal right of petitioner. The claim that petitioner will be injured, perhaps ruined, by the competition of the municipalities brought about by the use of the moneys, therefore, presents a clear case of *damnum absque injuria*. Stated in other words, these municipalities have the right under state law to engage in the business in competition with petitioner, since it has been given no exclusive franchise. If its business be curtailed or destroyed by the operations of the municipalities, it will be by lawful competition from which no legal wrong results." 302 U. S. at 479–480.

The Court further made it clear that one whose only injury will result from lawful competition has no standing to question whether the contracts with the municipalities were authorized by statute and thus legal. It said:

"Can anyone who will suffer injurious consequences from the lawful use of money about to be unlawfully loaned maintain a suit to enjoin the loan? An affirmative answer would produce novel and startling results. . . . Considered apart, the lender owes the sufferer no enforcible duty to refrain from making the unauthorized loan; and the borrower owes him no obligation to refrain from using the proceeds in any lawful way the borrower may choose." 302 U. S. at 480.

Appellants undertake to escape the impact of this case on three grounds. First, they say, as did the District Court, that in the *Alabama* case the competition was lawful, whereas here it is unlawful, since none of the defendants, all Federal officers and agencies, have any franchise to supply electric power to the public from the States involved.[4] But *Tennessee Power Co.* v. *TVA*, *supra*, which followed the *Alabama* case, shows that any competition which may result from the contractual arrangements of the Federal agencies here cannot be regarded as unlawful. In that case various public utility companies which generated, distributed, and sold electricity in the States within the TVA area sued to enjoin the Authority from generating, distributing, and selling electric power in duplication of, or competition with, any of their services. The Supreme Court denied their capacity to maintain the suit on the reasoning employed in the *Alabama Power* opinion. 306 U. S. 139–140.[5] It rejected the contention that the competition which the Authority's program would provide was illegal, pointing out that the charters and franchises awarded to the public utility companies did not "involve the grant of a monopoly or render competition illegal." 306 U. S. at 139.[6] So here, appellants point to no provision in their charters which purports to grant them a monopoly or to protect them from competition by a Federal instrumentality, with the result that they have no basis for asserting that the competition which will be provided by SPA's activities is illegal as to them. This is not to say, of course, that even if the franchises granted by the States had contained provisions purporting to protect the power companies from Federal competition, it would have any effect as against the Federal Government.

Second, appellants attempt to differentiate their case from the *Alabama Power* and the *Tennessee Power* cases on the ground that here they have alleged an unlawful conspiracy against them by the defendant Government officials and agencies. They summarize their claim of conspiracy as one of concerted action among the appellees to injure their businesses by unlawful means, i. e., by violations of the Rural Electrification Act and the Flood Control Act. It is contended that in neither the *Alabama* nor the *Tennessee* case was the conspiracy which was alleged based on violations of statutes.

In the *Alabama* case, however, as our opinion states, 67 App. D. C. at 231, a conspiracy was alleged, based in part on the claim that the actions there were unconstitutional, that is, violated the Federal Constitution. The District Court

[4] There is no contention that the federated cooperatives do not possess franchises to generate, distribute and sell electric power.

[5] "The appellants further argue that even if invasion of their franchise rights does not give them standing, they may, by suit, challenge the constitutionality of the statutory grant of power the exercise of which results in competition. This is but to say that if the commodity used by a competitor was not lawfully obtained by it the corporation with which it competes may render it liable in damages or enjoin it from further competition because of the illegal derivation of that which it sells. If the thesis were sound, appellants could enjoin a competing corporation or agency on the ground that its injurious competition is *ultra vires*, that there is a defect in the grant of powers to it, or that the means of competition were acquired by some violation of the Constitution. The contention is foreclosed by prior decisions that the damage consequent on competition, otherwise lawful, is in such circumstances *damnum absque injuria*, and will not support a cause of action or a right to sue."

[6] Although some of the individual States had exempted Federal agencies from the jurisdiction of their public utilities commissions, the opinion of the Supreme Court obviously did not turn on this. Indeed, the Court said: "The Authority's action in these states is consonant with state law, but, as has been shown, if the fact were otherwise, the appellants would have no standing to restrain its continuance." 306 U. S. at 142.

found that no conspiracy existed. Both this court and the Supreme Court held that the plaintiffs had no standing to sue and dismissed the complaint. It is true that the Supreme Court stated that, if "conspiracy" were involved, a different case would be presented, 302 U. S. at 479, but in view of the allegations of the complaint in that case, its view must have been that the charge of conspiracy as there stated gave no standing to sue. Certainly here then, where the charge of conspiracy is hinged, as appellants state, on the doing of acts allegedly in violation of statutes, the result must be the same.

In the *Tennessee Power* case there were allegations of conspiracy between the Public Works Administrator (acting under the PWA statute) and TVA officials (acting under the TVA statute, alleged to be unconstitutional) to injure appellants' business. The District Court made findings negativing these allegations. The Supreme Court accepted these findings, and indicated that concerted action and cooperation between Federal officials, acting under different acts, in establishing a power program in competition with utility companies, "does not spell conspiracy to injure their business." 306 U. S. at 147. The Court's conclusion was that, notwithstanding allegations of conspiracy on the part of TVA officials to do unlawful acts in violation of the Constitution, in no aspect of the case did the power companies have standing to maintain the suit. The inevitable conclusion here then must be that conspiracy allegations of the type made here—based on allegedly unlawful acts in violation of statutes—do not establish a right to sue.[7]

Third, appellants seek to distinguish the *Alabama* and *Tennessee* cases on the ground that the plaintiffs in those cases did not claim a right to maintain the action under the statutes involved, whereas in this case they do claim a right to sue under the REA and the Flood Control Act. But we think these acts do not support their claim.

Neither the Rural Electrification Act, the Flood Control Act of 1944 nor the "continuing fund" [8] and other appropriation acts referred to in these proceedings provides for judicial, or indeed even administrative, review of action taken by the respective agencies.[9] These statutes differ sharply from the Transportation Act, 1920, which specifically authorized suits for injunction by any "party in interest." Thus cases arising under that statute, such as *Singer & Sons* v. *Union Pacific R. Co.*, 311 U. S. 295, 303–304 (1940), upon which appellants rely, have no relevance here. Nor do the statutes here create funds to which appellants have a specific right—a right not abridgeable by illegal administrative action—as had the State of Oklahoma in the road funds involved in *Oklahoma* v. *Civil Service Commission*, 330 U. S. 127 (1947), or as the milk producers had to the fund for support payments in *Stark* v. *Wickard*, 321 U. S. 288 (1944). The statutory scheme now before us clearly contemplates Congressional, rather than judicial, review of the governmental activities here in question, all of which are nonregulatory and which include disposal of surplus electric power turned over to the SPA by the Department of the Army. Congress has reserved for itself control over such activities through the power of making annual appropriations for the executive departments affected, and by providing specifically that the contingent fund created by Section 5 of the Flood Control Act of 1944, 16 U. S. C. § 825s–1, may be expended only to the extent of annual appropriations for the purposes of the Act. The continuance of defendants' activities here complained of is therefore subject to review by Congress acting each year on the appropria-

[7] In the case before us, the District Court has made no specific finding that the defendants have not been guilty of conspiracy. But it did find that the contracts made by them are valid and authorized by the statutes, thus removing the only basis for the charge of conspiracy urged by appellants. If we may consider the findings of the District Court in connection with our consideration of appellants' capacity to sue, as the Supreme Court appears to have done in the Tennessee Power case, then plainly the allegations of conspiracy are without foundation. But we need not rely on those findings.

[8] In the First Supplemental National Defense Appropriation Act, 1944, 57 STAT. 621, Congress created a continuing fund of $100,000 under the SPA Administrator, which was increased to $300,000 in 1949. The purpose of establishing this fund was "to defray emergency expenses necessary to insure continuity of electric service and continuous operation of the facilities and to cover all costs in connection with the purchase of electric power and energy and rentals for the use of facilities for the transmission and distribution of electric power and energy to public bodies, cooperatives and privately owned companies." 16 U. S. C. § 825s-1 (1952). With the evident purpose of nailing down its control over the expenditure of this continuing fund in unmistakable terms, Congress amended the Act in 1951 to provide that "expenditures from this fund to cover such costs in connection with the purchase of electric power and energy and rentals for the use of facilities are to be made only in such amounts *as may be approved annually in the appropriation Acts.*" (Italics added.) 65 STAT. 249, 16 U. S. C. § 825s-1 (1952).

[9] However, to the extent that action taken by the Federal Power Commission in setting rates for the sale of power by the Secretary of the Interior under the Flood Control Act may be reviewed by the Federal circuit courts of appeals on the application of any person aggrieved by the Commission's rate fixing order, there may be judicial review of some aspects of the arrangements here involved. 16 U. S. C. § 825*l* (1952). No such order is before the court.

tions sought by the defendants.[10] It is not—under the controlling precedents—subject to review by this court.[11]

Appellants seek, finally, to base their right to bring this action on their alleged status as persons "suffering legal wrong" or "adversely affected or aggrieved" within the meaning of Section 10 (a) of the Administrative Procedure Act, [12] 5 U. S. C. § 1009 (a) (1952). But the Act does not help appellants. The text of Section 10 (a) reads:

"SEC. 10. Except so far as (1) statutes preclude judicial review or (2) agency action is by law committed to agency discretion—

"(a) RIGHT OF REVIEW.—Any person suffering legal wrong because of any agency action, or adversely affected or aggrieved by such action within the meaning of any relevant statute, shall be entitled to judicial review thereof."

The terms used in this section are terms of art. As the Attorney General's Manual on the Administrative Procedure Act points out: "The delicate problem of the draftsmen was to identify in general terms the persons who are entitled to judicial review. As so used, 'legal wrong' means such wrong as particular statutes and the courts have recognized as constituting grounds for judicial review. 'Adversely affected or aggrieved' has frequently been used in statutes to designate the persons who can obtain judicial review of administrative action.' [7 See section 9 of the Securities Act (15 U. S. C. 77i), 'any person aggrieved'; section 402 (b) (2) of the Communications Act (46 U. S. C. 402), 'person aggrieved or whose interests are adversely affected'; section 1006 of the Civil Aeronautics Act (49 U. S. C. 646), 'person disclosing a substantial interest in such order'.] The determination of who is 'adversely affected or aggrieved . . . within the meaning of any relevant statute' has 'been marked out largely by the gradual judicial process of inclusion and exclusion, aided at times by the courts' judgment as to the probably legislative intent derived from the spirit of the statutory scheme.' Final Report, p. 83; see also pp. 84–85. The Attorney General advised the Senate Committee on the Judiciary of his understanding that section (10 (a) was a restatement of existing law. More specifically he indicated his understanding that section (10 (a) preserved the rules developed by the courts in such cases as *Alabama Power Co.* v. *Ickes*, 302 U. S. 464 (1938); *Massachusetts* v. *Mellon*, 262 U. S. 447 (1923); *The Chicago Junction Case*, 264 U. S. 258 (1924); *Sprunt & Son* v. *U. S.*, 281 U. S. 249 (1930); *Perkins* v. *Lukens Steel Co.*, 310 U. S. 113 (1940); and *Federal Communications Commission* v. *Sanders Brs. Radio Station*, 309 U. S. 470 (1940). Sen. Rep. p. 44 (Sen. Doc. p. 230). This construction of section 10 (a) was not questioned or contradicted in the legislative history.[8] [8 See *American Stevedores, Inc.* v. *Porello*, 330 U. S. 446 (1947).] Also implied is the continuing role of the courts in determining, in the context of constitutional requirements and the particular statutory pattern, who is entitled to judicial review." (p. 96)

Section 10 (a) is for the benefit of "any person suffering legal wrong," that is, one whose legal rights have been violated. As we have seen, these plaintiffs cannot effectively make such a claim. Nor are we confronted with any relevant statute within the meaning of which the plaintiffs are "adversely affected or aggrieved."

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[10] See note 8, *supra*. Congress has granted to the Department of the Interior the funds necessary to allow SPA to proceed. *E. g.*, Public Law 172, 83rd Cong., 1st Sess. (1953), 67 STAT. 261–62; Public Law 465, 83rd Cong., 2d Sess., 68 STAT. 361 (1954), providing funds for operation and maintenance as well as for the continuing fund under Section 5 of the Flood Control Act of 1944. In so viewing the statutory scheme we are aware that the Committees of the 82nd Congress have stated that action in appropriating funds for SPA was not intended to prejudge the validity of the SPA contracts involved nor as a congressional interpretation of applicable law. S. Rept. No. 1803, 82nd Cong., 2d Sess. (1952); H. Rept. No. 2451, 82nd Cong., 2d Sess. (1952). But our view of the legal import of the statutory scheme as a whole is not dependent on the making or denial of appropriations to SPA in any particular year.

[11] Appellants contend that they are members of a special class for the benefit and protection of which the statutes in question imposed a duty on the defendant public officers to refrain from acting as they have done. But we find nothing in the statutes which creates any duty to benefit and protect public utility companies. Rather it seems plain that Congress reserved the right to supervise the activities of the agencies involved, including the protection of utility companies. Without some special provision for judicial review, we cannot disregard the long established rule that a utility company, the only interest of which is that it may suffer from the competition of a public power program, cannot enjoin the execution of that program.

[12] The absence of a provision for judicial review in the relevant statutes does not ipso facto negate by implication the right to judicial review under the preclusion clause of Section 10 of the Administrative Procedure Act. Airline Dispatchers Ass'n v. National Mediation Board, 89 U. S. App. D. C. 24, 189 F. 2d 685, *cert. denied*, 342 U. S. 849 (1951). But preclusion of judicial review might well be implied here from the statutory scheme involved, at least as we view it, though we do not need to go that far. *Cf.* Chicago & Southern Air Lines v. Waterman S. S. Corp., 333 U. S. 103 (1948); Trans World Airlines v. Civil Aeronautics Board, 184 F. 2d 66 (2d Cir. 1950), *cert. denied*, 340 U. S. 941 (1951).

Section 10 (b) of the Administrative Procedure Act does not help appellants.[13] The reference in that section to "any court of competent jurisdiction" does not of itself establish the jurisdiction of the Federal courts over an action not otherwise cognizable by them. Section 10 (b) does not render competent a court which lacks jurisdiction on any other ground. *Blackmar* v. *Guerre*, 342 U. S. 512 (1952); *Almour* v. *Pace*, 90 U. S. App. D. C. 63, 193 F. 2d 699 (1951); *Aktiebolaget Bofors* v. *United States*, 90 U. S. App. D. C. 92, 194 F. 2d 145 (1951).

Although we thus arrive at the conclusion that the review provisions of the Administrative Procedure Act do not provide the appellants here with standing to sue, we are mindful of the fact that "it would be a disservice to our form of government and to the administrative process itself if the courts should fail, so far as the terms of the Act warrant, to give effect to its remedial purposes where the evils it was aimed at appear." *Wong Yang Sung* v. *McGrath*, 339 U. S. 33, 41 (1950).[14] The instant case does not, however, involve such evils. While in the light of the decisions of the Supreme Court we would certainly be prepared to hold in an appropriate case that one who complains of administrative action may find a remedy under the Act beyond the strict scope of judicial review recognized prior to its adoption, no judicially enforceable right of plaintiffs has been disregarded by the administrative action brought before us for review. There exists, therefore, no basis for recognizing plaintiffs' standing to bring this action under the judicial review provisions of the Administrative Procedure Act.[15]

Neither the pleadings nor the record before us suggests any other basis on which the plaintiffs would have standing to sue. Clearly, plaintiffs' interest as citizens, property owners, or franchise holders considered separately from, and not merely in aid of, their right to challenge alleged unlawful competition, confers no standing upon them to challenge defendants' actions in the courts. Merely as such, their status is no different from that of ordinary taxpayers who would not have standing to sue here. *Massachusetts* v. *Mellon*, 262 U. S. 447 (1923).

Nor does this case fit the type of situation in which parties economically affected by *regulatory* action on the part of the Government have been held entitled to seek judicial relief, whether the Government has taken action specifically directed against plaintiff or whether the action taken threatens to affect plaintiff's interest adversely though not singling him out specifically. In many such cases of directory or restrictive governmental action, the courts have taken jurisdiction pursuant to specific judicial review provisions in the regulatory statute,[16] under the Administrative Procedure Act,[17] or in the exercise of their general equity powers.[18] But where, as here, there is no "legislative declaration of rights," [19] no regulatory action by the Government, and no special provision for judicial review enlarging on the constitutional equity powers of the Federal courts, plaintiff can appeal only to those equity powers, and he must show more than that he is merely a person economically affected or otherwise aggrieved by some governmental activity.[20]

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[13] "SEC. 10. Except so far as (1) statutes preclude judicial review or (2) agency action is by law committed to agency discretion—

* * * * * * * *

"(b) FORM AND VENUE OF ACTION.—The form of proceeding for judicial review shall be any special statutory review proceeding relevant to the subject matter in any court specified by statute or, in the absence or inadequacy thereof, any applicable form of legal action (including actions for declaratory judgments or writs of prohibitory or mandatory injunction or habeas corpus) in any court of competent jurisdiction. Agency action shall be subject to judicial review in civil or criminal proceedings for judicial enforcement except to the extent that prior, adequate, and exclusive opportunity for such review is provided by law." 5 U. S. C. § 1009 (b) (1952).

[14] See also the statement of Mr. Justice Clark in Heikkila v. Barber, 345 U. S. 229, 232 (1953), where he referred to the Senate and House committee reports on the Administrative Procedure Act and added: "The spirit of these statements together with the broadly remedial purposes of the Act counsel a judicial attitude of hospitality towards the claim that § 10 greatly expanded the availability of judicial review." Cf. Frankfurter, J., dissenting: "* * * the Administrative Procedure Act should be treated as a far-reaching remedial measure, affording ready access to courts for those who claim that the administrative process, once it has come to rest, has disregarded judicially enforceable rights." *Id.* at 237, 238.

[15] It may, moreover, be doubted whether the agency action here involved (consisting of the making of loans to and contracts with qualified parties, which plaintiffs are not) constitutes agency action within the meaning of Section 2 (g) of the Act, 5 U. S. C. § 1001 (g), which this court could review if plaintiffs were within the provisions of Section 10 (a) of the Act. See Hearst Radio v. Federal Communications Commission, 83 U. S. App. D. C. 63, 167 F. 2d 225 (1948).

[16] See Columbia Broadcasting System v. United States, 316 U. S. 407 (1942); Associated Industries v. Ickes, 134 F. 2d 694 (2d Cir.), *reversed on other grounds*, 320 U. S. 707 (1943).

[17] 5 U. S. C. § 1001 *et seq.* (1952); B. F. Goodrich Co. v. Federal Trade Commission, 93 U. S. App. D. C. 50, 208 F. 2d 829 (1953).

[18] Embassy Dairy v. Camalier, 93 U. S. App. D. C. 364, 211 F. 2d 41 (1954).

[19] 211 F. 2d at 43.

[20] This distinction is well illustrated by litigation under the Bituminous Coal Act, 50 Stat. 72 (1937), 15 U. S. C. §§ 828 *et seq.* (1940). There an action brought by the City of Atlanta to enjoin fixing of coal prices failed for lack of standing to sue, City of Atlanta v. National Bituminous Coal Com'n, 26 F. Supp. 606 (D. C. D. C.), *affirmed*, 308 U. S. 517 (1939); but a complaint against specific coal prices brought under the review provisions of Section 6 (b) of the statute by private business interests claiming to be adversely affected was upheld. Associated Industries v. Ickes, *supra* note 16.

We conclude that appellees' motion to dismiss should have been granted. In consequence, we do not reach either the substantive or the procedural and evidentiary questions urged on us by the parties.

The judgment of the District Court will be vacated and the case will be remanded to the District Court with directions to dismiss the complaint.

It is so ordered.

PRETTYMAN, *Circuit Judge*, dissenting: I disagree with my brethren in their disposition of this case.

In the complaint plaintiffs say that by mutual agreements, evidenced by written documents, certain Government officials and certain private parties, all acting in concert, plan to destroy plaintiffs' private business and property by acts which are beyond the power conferred by the Congress upon the executive officials involved and are also illegal because in violation of statutes. This court says plaintiffs had no standing to sue, they presented no justiciable controversy. With that I disagree.

The facts are tremendously complicated if described in detail, but they can be stated simply in a general outline which is sufficient for present purposes. The *dramatis personae* are, by groups, five in number:

1. A number of rural cooperative electric distribution companies. They buy electric power at wholesale and sell it at retail to farmers and others in rural areas principally in Missouri. For these purposes they own and operate distribution lines, stations, etc. Presently they buy their power from the plaintiff Companies.

2. A number of federations of the foregoing cooperatives, which neither own nor operate any facilities but act advantageously in many matters on behalf of their respective member-cooperatives. These federations are called "Super-Coops".

3. A number of utility companies, privately owned and operated, which own and operate generating plants and transmission lines. They generate electric energy and transmit it over long high-voltage lines to central stations of the rural cooperatives, where they sell at wholesale. They own hundreds of miles of these transmission lines and a number of generating plants. In the complaint they say they are ready, able and willing to supply all requirements of all customers, present and potential, in these areas. We shall call them the "Companies". They are our plaintiffs.

4. The Rural Electrification Administration. This is a Government agency in the Department of Agriculture. It was created by the Rural Electrification Act [1] and has power to lend money. We shall call it the "REA".

5. The Southwestern Power Administration. This is a Government agency created under emergency war power by Executive Orders and thereunder by the Secretary of the Interior. It was authorized by statute [2] to sell the surplus energy generated at multiple-purpose reservoir projects under the control of the Department of the Army. We shall call it the "SPA".

Five sets of contracts were attacked in the complaint. Each set involved the REA, the SPA, and a Super-Coop as parties. The set used by the court as illustrative is the set to which a Super-Coop called Northwestern (or NW) is a party. This set consisted of three contracts, one a loan contract, one a lease-option contract, and the third a power contract. These contracts were integrated by reciprocal conditions, each being dependent upon execution of the others.

In brief outline what the complaint says in regard to the illustrative contracts is this: By these contracts it was agreed that REA will lend Super-Coop money to build a generating plant and certain transmission lines; Super-Coop will then do two things, lease the lines to SPA for forty years and sell to SPA the entire output of the plant for forty years; Super-Coop will then purchase from SPA all its requirements of electric energy for forty years; [3] the price to be paid Super-Coops by SPA for the output of the plant is to be the cost (principal and interest) of financing the loan to build the plant, plus operating costs assignable to the plant, and the rental for the lease of the lines is to be the cost of financing the loan to build the lines, plus operating costs assignable to the lines; and the purchase of power back from SPA by Super-Coop on behalf of its member rural distributors will be at a rate and not involved in the loan accounting.

[1] 49 Stat. 1363 (1936), as amended, 7 U. S. C. A. §§ 901–914.

[2] Sec. 5, Flood Control Act of 1944, 58 Stat. 890, amended, 61 Stat. 501 (1947), 16 U. S. C. A. § 825s.

[3] *E. g.*, one allegation of the complaint is that the members of Northwestern would be required "to cease purchasing electric energy from their present suppliers, including plaintiffs, and to purchase all of their requirements for electric energy from Northwestern and indirectly from SPA". Other allegations are that SPA agrees to supply NW's requirements of electric energy up to 40,000 kw, that the aggregate annual peak demand of NW members in 1949 was approximately 10,000 kw and estimated to increase to 22,000 kw by 1954; and that the capacity of the plant to be built by NW is 40,000 kw.

The results of these confederated and integrated arrangements, say plaintiffs in their complaint, will be:

1. A duplication of the existing plants and transmission lines of the Companies which are presently fully serving the needs of the several rural areas involved.

2. A transfer by contract of all this rural area business from the Companies to SPA.

3. Loans from REA secured by nothing but the plants and lines to be built with the money loaned.

4. Engagement on a major scale by SPA in the ordinary utility business of generating energy, transmitting it, and selling it at wholesale.

5. The lending of money by REA specifically for the building of plants to serve municipalities of more than 1,500 population.

While the complaint alleges the contemplated sets of contracts to be illegal in a number of respects, we need now notice only one. A principal thrust of the complaint is against concerted action, formalized by written agreement, of the Government officers and the Super-Coops. The allegation is that a number of persons—suppliers and customers—confederated to deprive plaintiffs of their business by entering into agreements whereby all the customers of plaintiffs would transfer their patronage to a potential competitor. Technically in legal terms such an agreement and concert of action is a conspiracy.

Another concert of action described in the complaint is among the Government officers. In that respect the complaint deals with violations of the statutes conferring authority. The court considers and discusses that concert of action. But that is not the crucial allegation as to concert of action, as I read the complaint. The crucial point is the agreement between the officials and the private parties, *i. e.*, the Super-Coops.

There are several phases to the present problem. The first phase is whether the controversy itself, as described in the complaint, is a justiciable one; this consideration is apart from the identity of the defendant parties against whom the relief is sought. A second phase is whether, if the dispute itself is justiciable, the plaintiffs are blocked by the fact that their suit is against Government officers. The court does not consider or pass upon this second phase of the problem, and I shall not do so either. Another phase is whether the Super-Coops are indispensable parties, but the court does not reach that question and I shall not.

It seems to me the allegation of damage by concerted action by the officials and the Super-Coops presents a case of damage by legal wrong. A civil action will lie upon that premise under all the rules and authorities. Disagreeing with the court, I think the plaintiffs did present a justiciable controversy, so far as the allegation of an actionable wrong is concerned. It follows that I think the court should have proceeded to consider the other point regarding justiciability, *i. e.*, whether the suit would lie against these Government officers, and then proceed to the point as to the Super-Coops being necessary parties.

It is elementary law that an individual, whether seller or customer, can do many things by himself which he cannot do in concert with others. He can fix his own prices, select his own customers or suppliers, limit his territory, and do many things, so long as he acts alone. But the law forbids such activities by agreement. Statutes make unlawful "Every contract * * * in restraint of trade" [4] and the making of any lease or contract of sale "on the condition * * * that the lessee or purchaser thereof shall not use * * * the goods * * * or * * * commodities of a competitor * * * of the lessor or seller, where the effect * * * may be to substantially lessen competition." [5] We need little citation of authority to establish the proposition that a restraint upon trade which suppresses competition and accomplishes a foreclosure of an appreciable segment of a market is illegal. A few citations will suffice.[6]

To be sure, the complaint before us does not contain an allegation of jurisdiction under the antitrust laws. But that is not our problem. Our problem is whether these plaintifis state a case which shows them to be suffering a legal wrong, apart from the identity of the defendants.

If a citizen alleges that threatened conduct will invade a private, substantive, legally protected interest of the citizen, whether the interest is protected by

[4] 26 STAT. 209 (1890), 15 U.S.C.A. § 1.
[5] 38 STAT. 731 (1914), 15 U.S.C.A. § 14.
[6] United States v. Griffith, 334 U.S. 100, 92 L.Ed. 1236, 68 S.Ct. 941 (1948); Standard Oil Co. v. United States, 337 U.S. 293, 93 L.Ed. 1371, 69 S.Ct. 1051 (1949). And see Rashid, *Antitrust Aspects of Exclusive Dealing Arrangements*, 40 GEO. L.J. 241 (1952); 5 TOULMIN, ANTITRUST LAWS OF THE UNITED STATES §§ 10.25, 10.31 (1950).

common law or by statute, he presents a justiciable controversy.[7] And moreover, if a citizen suffers a "legal wrong" the Administrative Procedure Act makes certain and clear that he has a standing in court.[8] I think our plaintiffs show a case which gives them standing to sue. They allege not only that their business would be impaired by these contracts but that it would be wholly taken. Their right to do business is protected by statute from destruction by an agreement among customers and competitors, where the agreement amounts to unreasonable restraint of trade or of competition.

The court treats the contracts as merely setting up competition for the Companies. I do not see them that way. Allegedly these contracts would take all this business away from the Companies and give it to the Government. This would be complete destruction by concerted action, not a mere establishment of competition. And therein lies the vast difference between this situation and the *T. V. A.*[9] and *Alabama Power*[10] cases. In the *T. V. A.* case the problem was one of straight-out competition. The companies objected to the Government's coming into the open market to sell power in competition with private business. There was no agreement between T. V. A. and all the customers of the companies whereby the customers would stop buying the companies' power and buy all their power from the Government. The Court referred expressly to the findings of the District Court that there was no concert of action. The Court also pointed out that cooperation between two Government officials, each acting under authority of a statute, does not spell conspiracy. But that is not the case at bar.

In *Alabama Power Co.* v. *Ickes* Mr. Justice Sutherland, writing for the Court with meticulous care and completeness, reserved from the decision the question we now have. The case presented a challenge to Government loans on the ground of the resultant competition to the Company. The Court cautioned in the very beginning of the discussion of the point, "If conspiracy or fraud or malice or coercion were involved a different case would be presented, but in their absence, plainly enough, the *mere* [underscoring Mr. Justice Sutherland's] consummation of the loans and grants will not constitute an actionable wrong."[11] And he closed the opinion by distinguishing "many other cases" on the ground that they involved "fraud, coercion, malice, conspiracy, or some other element or condition of controlling force". In the course of the opinion the Justice referred by way of illustrative example to a suppositional John Doe who operates a grocery store and objects to a loan being made to a Richard Roe who proposes to open a competing store. The lack of legal right on John's part to action against Richard is obvious. But a wholly different problem would be presented if all the customers of John agreed by contract with Richard not to buy any more groceries from John but to buy them all from Richard upon condition that Richard would build a store. Any such agreement would be clearly illegal, and John could bring a civil action to restrain it[12] or to secure triple damages on account of it.[13]

I think we should proceed to consider other phases of the jurisdictional problem presented by this case and, if these be resolved in favor of plaintiffs, proceed to the merits as the District Court did.

HOUSE ACTION

Chairman HAYDEN. We would like to have your comment on the action taken by the House, Secretary Aandahl.

Mr. AANDAHL. Mr. Chairman, the question that the committee has before it, dealing with the $6 million appropriation for the continuing fund and of the unoperative contracts, is one of the most delicate and difficult problems that we have in the Department of the Interior. You are well aware of the problems and the implications

[7] See, *e. g.*, discussion in Associated Industries v. Ickes, 134 F. 2d 694, 700–701 (2d Cir. 1943), *rev'd on other grounds*, 320 U. S. 707, 88 L. Ed. 414, 64 S. Ct. 74 (1943); Duke Power Co. v. Greenwood County, 91 F. 2d 665, 676 (4th Cir. 1937), *expressly approved*, 302 U. S. 485, 590, 82 L. Ed. 381, 58 S. Ct. 306 (1938); and in concurring opinion of Mr. Justice Frankfurter in Anti-Fascist Committee v. McGrath, 341 U. S. 123, 152, 95 L. Ed. 817, 71 S. Ct. 624 (1951).

[8] Sec. 10 (a), 60 STAT. 243 (1946), 5 U. S. C. A. § 1009 (a).

[9] Tennessee Power Co. v. T. V. A., 306 U. S. 118, 83 L. Ed. 543, 59 S. Ct. 366 (1939).

[10] Alabama Power Co. v. Ickes, 302 U. S. 464, 82 L. Ed. 374, 58 S. Ct. 300 (1938).

[11] *Id.*, 302 U. S. at 479.

[12] 38 STAT. 737 (1914), 15 U. S. C. A. § 26.

[13] 38 STAT. 731 (1914), 15 U. S. C. A. § 15.

that are involved when the Government does not fulfill a contract that has been signed. That is the circumstance with which we have been dealing in the past 2 years under the direction of the Congress to try to work out an alternative arrangement.

May I call your attention to the appeal that was made by the Department of the Interior to the Senate committee from the action taken by the House. In that appeal we request that the amounts proposed in the President's budget be restored and that additional $800,000 be added to continue interim contracts during the coming fiscal year.

COMPLETION OF ALTERNATE CONTRACTS

Chairman HAYDEN. Is that for the whole year?

Mr. AANDAHL. That is for the whole year. That proposal is made in the hope that the alternate contracts can be completed at an early date and put into effect and thereby establish a satisfactory means of handling this problem that we have had.

Chairman HAYDEN. How long have those alternate contracts been under negotiation?

Mr. AANDAHL. They have been under negotiation since, I would say, the middle or early part of fiscal 1954. The action that was taken by Congress in connection with the 1954 appropriation directed us to renegotiate those contracts. We got into it just as quickly as we could.

I might say that the Department of the Interior operated in somewhat of a secondary position in that renegotiation, because basic to the alternate arrangement was an integration contract between the cooperatives and the utilities. When that relationship could be worked out it was not too difficult for us to enter into a hydro contract with the cooperative, to sell them the hydro power they needed in the integration. So we have been in somewhat of a secondary position in this negotiation.

But during the last few months, I think we have arrived at a draft of the hydro contract that is reasonably satisfactory for the purposes that are needed. That has been mimeographed and made available to the several G. & T. cooperatives. This appeal statement is the position that is recommended by the Department of the Interior.

Chairman HAYDEN. That statement was included in the record.

SUGGESTED LANGUAGE PROVISION

Mr. AANDAHL. I would like to make one further comment, and that is this: If the Senate committee should be disposed to support the position established by the House in the bill, I would suggest that on page 7 of the appropriation bill, at the end of line 17, this language be added:

None of such funds shall be used to implement present inoperative contracts until such contracts are renegotiated.

The reason that I make the suggestion is this: You will recall that in the 1954 appropriation $1.2 million was appropriated in the continuing fund. At the same time that the appropriation was made in the continuing fund, there was a directive in the committee report to negotiate alternate contracts, and as a result of the circumstance that prevailed, with the committee report suggesting the negotiating

of alternative contracts, the appropriation bill just blankly making $1.2 million available in the continuing fund, we were brought into court by Central Cooperative to use the remaining portions of the $1.2 million to implement or to bear the expense that would have been incurred had the inoperative contract with Central Cooperative been made active.

We are faced with the same type of situation here. The House committee has appropriated $6 million in the continuing fund and placed no limitations on its use in the appropriation bill itself, but then in the committee report has suggested that we renegotiate those contracts. I am afraid that we again would be up against exactly the same legal problem.

Chairman HAYDEN. I think you mean it would be amended rather than renegotiated.

Mr. AANDAHL. "Amended" is probably the word that should be used there.

So, if you wish, in my suggested language there, I would be agreeable to have the language changed to "until such contracts are amended."

Then right in that connection, there is also one other suggestion. In line 11 if we are going to follow that procedure, the $684,000 should be changed to, I would suggest, about $1 million. In the amending of these contracts and the negotiations that would have to take place to accomplish that, a great deal of additional work would be required of SPA. This figure of $684,000 was established on the basis of completing the alternative contracts that are presently under negotiation.

Senator YOUNG. How much of the additional amount would be for new vehicles?

Mr. AANDAHL. No. The exchange of 4 passenger vehicles is only a minor portion of the $684,000. This increase would be for the increased administrative responsibilities that would be involved in negotiating the amendments to the contracts and in the additional administrative expense of putting those contracts, when amended, into force and effect. There would be a continuing increased administrative expense that was not contemplated when the $684,000 was suggested by the Department in the budget.

Chairman HAYDEN. As I understand your proposal, you want to use the continuing fund to implement the contracts that may be made in the future.

Mr. AANDAHL. My proposal is that the continuing fund, in connection with these inoperative contracts, be made available when those contracts have been amended, so that they are in satisfactory form.

I might also add that during that interim period during which we will be making or entering into those negotiations for the amendments, we could use a portion of the $6 million, as the language is, with the proposed additional sentence, for continuing interim contracts until we get the final amendments worked out.

TYPE OF CONTRACTS

Chairman HAYDEN. Just what type of contracts do you have in mind?

Mr. AANDAHL. I had in mind amendments to the present contracts generally in line with the suggestion made in the House committee report.

Chairman HAYDEN. The House committee report says:

> In reactivating the contracts with the G. and T. cooperatives, the Department of the Interior is instructed to delete any provisions providing for the option to purchase and the transmission lines or other facilities by the Southwestern Power Administration. The contracts are also to provide:
> (1) That the G. and T. cooperatives will operate and maintain their own transmission systems under lease on the SPA; (2) that the SPA and the G. and T. cooperatives settle accounts for power purchased and sold on the basis of net-balances, as is done under existing contracts to which SPA and private utilities are parties; and (3) that power and energy will be delivered to the load centers of all G. and T. contracting systems at basic SPA rate.

Mr. AANDAHL. That would be taken as the basis for amendments to be negotiated.

Chairman HAYDEN. Suppose we just not do anything; just went along with the House language; then what would you do about reactivating the contracts?

Mr. AANDAHL. I am just not sure what we would do. We would be in the dilemma of having an appropriation bill that would authorize us to reactivate the contracts just as they are and probably under considerable legal obligation to do so, and perhaps find ourselves in court if we did not do so. We would also have the problem of keeping faith with a suggestion that is made by the Congress in the committee report. I would like to have that difficulty cleared up by adding the sentence to the appropriation bill that I suggested.

STATEMENT OF HON. A. S. MIKE MONRONEY, A UNITED STATES SENATOR FROM THE STATE OF OKLAHOMA

MAINTENANCE OF PRESENT RATES

Chairman HAYDEN. Senator Monroney, if you want to ask any questions at this point we would be glad to have you do so.

Senator MONRONEY. Thank you, Mr. Chairman.

I wonder, in the proposals that you mention here, if the present rate charged by SPA will be maintained in that area?

Mr. AANDAHL. The present rate cannot be maintained under any circumstance.

Senator MONRONEY. Six and four-tenths mills, I believe it is today.

Mr. AANDAHL. It is about five and a half mills. That is under the schedule A for the full power supply of a customer.

Even if we complete the alternative contracts that are now being negotiated and completely forget about these inoperative contracts, the rate that will be charged under the A schedule will be 7.16 mills. A revised schedule is already before the Federal Power Commission.

If we were to not complete these alternative contracts on which we are working and reactivate the inoperative contracts, the operating expense to SPA would be substantially higher than it was anticipated when the rate of 7.16 was worked out. I am sure that with these inoperative contracts in effect, rate schedule A in the SPA area is going to be substantially above 7.16 mills. I know it will be that if we have a rate sufficient to repay the investment in power over a 50-year period

with interest, as is the general standard and policy that is used throughout Interior's power marketing agencies.

Senator MONRONEY. Would you not consider, though, in that rate the fact that the load, the plan, the design of the operation of this integrated system that Congress disrupted and that will have to again be built, you could again build up the load, that should these G. and T.'s be forced to pay the highest possible rate at the moment, in other words, before you build up the load or get the system back as it was originally planned to operate?

NECESSITY FOR NEW RATE STUDY

Mr. AANDAHL. We would have to make a new rate study, and that would be a rate study projected over a 50-year period, and this schedule A rate would not be charged only to the G. and T. cooperatives that we are talking about that are members, but it would be charged to all customers in the area that have contracts based upon the rate schedule A. So that would be the general rate for the entire SPA area, where we furnish a full supply of power to a customer.

Senator MONRONEY. That would be 7.16 mills?

Mr. AANDAHL. It is 7.16 with alternative contracts with the G. and T.'s anticipated. If we reactivate these inoperative contracts, it is going to a figure somewhat higher than that. The exact figure I do not know.

Chairman HAYDEN. Now it is about half past 12. We have to mark up a very minor appropriation bill at 2 o'clock. I think inasmuch as Mr. Wright has to be there and wrestle with this thing we ought to ask him some questions. Could you gentlemen come back at about 3 o'clock?

Mr. AANDAHL. Very glad to.

Chairman HAYDEN. We will have to ask you more about your troubles that have come up, in view of this changed situation.

The committee will recess at this time until 3 o'clock.

(Whereupon, at 12:20 p. m., the hearing was recessed to reconvene at 3 p. m. the same day.)

AFTERNOON SESSION, 3 P. M.

SOUTHWESTERN POWER ADMINISTRATION

STATEMENT OF FRED G. AANDAHL, ASSISTANT SECRETARY FOR WATER AND POWER; AND DOUGLAS G. WRIGHT, ADMINISTRATOR, SOUTHWESTERN POWER ADMINISTRATION

CONTINUING FUND

Chairman HAYDEN. The committee will be in order.

We have with us this afternoon Assistant Secretary Aandahl and Mr. Douglas Wright, who is the Administrator of the Southwestern Power Administration.

We would like to have your comments, gentlemen, on the action of the House, in view of the fact that the House has approved this appropriation, to which they make reference in the committee report as follows:

Continuing fund.—The continuing fund language has been inserted in the bill in the same manner in which it last appeared in the appropriation bill for the Department of the Interior for the fiscal year 1953. It provides that the SPA shall have authority to use power sales revenues, subject to an annual limitation placed in the appropriation bill, to pay for emergency expenditures, purchase of electric power and energy, and rentals for the use of transmission facilities. This action makes it possible to reactivate valid and legal contracts which certain generating and transmission cooperatives have with SPA. These contracts at their inception were examined by the Congress and funds were available to carry them out through the continuing fund for fiscal years 1950 through 1953.

The contracts in question have been tested in the courts. Ten private utility companies filed suit, attacking the legality of the contracts, in the United States District Court for the District of Columbia. The district court handed down an opinion on June 17, 1953, upholding the legality of the contracts. The companies appealed this decision. The Court of Appeals for the District of Columbia on April 28, 1955, held that the companies had no standing to sue and directed the district court to dismiss the companies' suit.

Then it goes on. We will place the entire extract covering this subject in the House committee report into the record at this point.

(The information referred to follows:)

SOUTHWESTERN POWER ADMINISTRATION

Appropriations, 1955	$2,165,000
Estimates, 1956	1,134,000
Recommended, 1956	684,000
Comparison:	
Appropriations, 1955	−1,481,000
Estimates, 1956	−450,000

Operation and maintenance.—A reduction of $450,000 below the budget estimate of $1,134,000 has been made by the committee. This reduction represents the amount budgeted for the purchase of energy and the payment of wheeling charges under existing contracts with private utility companies and cooperatives in the area. Funds for this purpose have been made available through reactivation of the continuing fund discussed in the following paragraphs.

Continuing fund.—The continuing fund language has been inserted in the bill in the same manner in which it last appeared in the appropriation bill for the Department of the Interior for the fiscal year 1953. It provides that the SPA shall have authority to use power sales revenues, subject to an annual limitation placed in the appropriation bill, to pay for emergency expenditures, purchase of electric power and energy, and rentals for the use of transmission facilities. This action makes it possible to reactivate valid and legal contracts which certain generating and transmission cooperatives have with SPA. These contracts at their inception were examined by the Congress and funds were available to carry them out through the continuing fund for fiscal years 1950 through 1953.

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The generating and transmission cooperatives originally borrowed approximately $70,000,000 from the Rural Electrification Administration for construction of system facilities on the security of their contracts with the Southwestern Power Administration. Operation of these contracts was suspended during the past 2 years because of action of the Congress in withholding the use of the continuing fund to implement them. This action placed the generating and transmission cooperatives in a precarious financial situation for which relief has been sought through negotiations with private utilities in the area looking to integration of the generating and transmission systems with the systems of the companies. These negotiations have not as yet resulted in contracts which would provide the generating and transmission's with necessary income from their several powerplants and facilities in order to retire the REA loans.

In reactivating the contracts with the G. and T. cooperatives, the Department of the Interior is instructed to delete any provisions providing for the option to purchase G. and T. transmission lines or other facilities by the Southwestern Power Administration. The contracts are also to provide: (1) that the G. and T. cooperatives will operate and maintain their own transm ssion systems under lease to the SPA; (2) that the SPA and the G. and T. cooperatives will settle accounts for power purchased and sold on the basis of net-balances as is done under existing contracts to which SPA and private utilities are parties; and (3) that power and energy will be delivered to the load centers of all G. and T. contracting systems at the basic SPA rate.

The Department is also instructed to provide for the recapture for the use of preference customers all power and energy to which they are entitled under the provision of section 5 of the Flood Control Act of 1944, and to negotiate as soon as possible a settlement with each contracting G. and T. cooperative effective as of the date of the passage of the bill.

The amounts provided in the bill for both Operation and Maintenance and the continuing fund are based on information at hand. However, since there was considerable variation in the informal estimates offered during the hearings as to SPA costs under the reactivated contracts and since the nature of the amendments to the contracts could affect the amounts required, it is recognized that some adjustment may be necessary at a later date.

FEASIBILITY OF RETURN TO ORIGINAL CONTRACTS

Chairman HAYDEN. What I want to ask, Mr. Wright and Mr. Aandahl, is: Is it feasible to return to the original contracts with the G. and T. cooperatives, after they have been inoperative for a period of 2 years? Can you answer it, Mr. Wright?

Mr. WRIGHT. Yes, it is feasible to return it to them. The previous testimony is that I think it would take about 3 to 5 years to restore the market conditions that existed at the time they were inoperative. But the contracts as originally drafted could be returned to; however, they could not be returned to with the funds provided by the House action.

I placed in the record before the Senate that if they were restored without amendment, we would require appropriation of $7,514,000, of which not to exceed $5,785,000 would be for the purchase of power and the rentals of transmission line, and $1,729,000 would be required for maintenance and operation, with the Government operating all of the lines as called for by the present contracts.

OPERATION AT LOSS

Chairman HAYDEN. You told the House it would result in a loss for the Southwestern Power Administration, of from 3 to 5 years. Do you still maintain that position?

Mr. WRIGHT. I would be operating at a loss until I built up power markets equal to those that were available at the time the contracts were made inoperative.

Chairman HAYDEN. Will you tell the committee the circumstances that would make it likely that you would have to operate at a loss for a period of a few years?

Mr. WRIGHT. Yes. It revolves around powerloads and generation. At the time the contracts became inoperative, certain towns in that area were counting on buying power from the Government not only for their peak service but also this offpeak thermalpower available from these generating and transmission plants. In other words, so we could load the plants at night. Two towns, Springfield and

Carthage, were the two large towns, but we also had contracts with Lockwood, Mo. and others and Lamar, Mo., wants a great deal more power than we have been able to provide them. We have had inquiries from numerous other towns throughout the area, and I think we filed a list with the committee giving information on some 100 towns that have asked us for service.

Well, now, when these contracts became inoperative, we had to tell these people we could not offer them service. The city of Springfield, for example, had held elections on whether or not to build a municipal plant, or whether to buy from the Southwestern Power Administration. By a margin of practically 5 to 2 vote, they had voted not to build a municipal plant. When the contracts became inoperative, they voted 7 to 1 to build a 50,000-kilowatt municipal plant. Now, that is night load of th ecity of Springfield and will be carried by its own generating plant rather than buying from the Government. So we have to wait now until load growth or other towns can be developed to get a night load to impose on these thermal plants.

For example, if a generating transmission cooperative has a peak load of 45,000 kilowatts, their night load will probably approximate 15,000 kilowatts. So at least for some hours of the day we have 30,000 kilowatts to place in the load curve some place if we are to load the steam plants. This successful operation requires that you have to load your steam plants so they run 24 hours a day, and you operate your hydroplants at about 150 hours a month, the hydroplants are knocking off the peaks. It has a tremendous advantage in that one reserve works for the whole system, you don't have independent reserves, which will make more salable power available than it would under independent operation. Maybe we would not take 5 years, Mr. Senator, but in these hearings I have had a lot of the testimony I gave 5 years ago read to me, and I want to be sure that I am allowing myself enough time to build up those loads. If human endeavor can load these systems in 3 years, we would load them in 3 years.

PROSPECT OF CONTRACT PROFIT OVER FULL LIFE

Chairman HAYDEN. Assuming you do operate at a loss at first, would the contracts be profitable over their full life of 40 years?

Mr. WRIGHT. There is not any question in my mind about that. They are as good contracts as we have anywhere as soon as we get the facilities loaded.

Chairman HAYDEN. In your opinion, is it necessary to reactivate these contracts in order to obtain the required integration that is necessary for G. & T's to repay their loans to the Rural Electrification Administration?

Mr. WRIGHT. Mr. Chairman, I do not think I ought to be called on to make that decision. I think I should tell you my views on it.

The companies assured Congress a number of years ago that these contracts were inopportune contracts and that a much better alternative arrangement, or at least as good an alternative arrangements could be found. On the basis of this testimony of the companies, as stated in the House report, the funds we had requested in the amount of $5,650,000 to operate these contracts for the coming fiscal year was

taken out and the appropriation of $1,500,000 only was allowed by the House. The Senate subsequently allowed $2 million. In conference it was finally set at $1,200,000, with a statement on the part of the managers for the House that none of those funds should be used to implement these contracts.

If you will recall, this action occurred very near the end of June. we were actually operating at that time a good portion of the farmers' western system in Oklahoma, and all of the central system in Missouri. Practically overnight we had to pull our crews out and drop those systems. We lost a lot of money.

I have disposed of, in the last couple of years, during the inoperative period, possibly $500,000 to $700,000 worth of equipment, which we had purchased to operate 3,000 miles of line and 600 substations which was changed by this action so we were only going to operate 1,000 miles of line and 20 substations. We had to cut down our force that had been trained and developed all of these years. Some of them were picked up by the generating and transmission cooperatives. That cost us money. It costs us money to hire and fire people in Government.

The whole reorientation program cost us money. Actually, we are about $6,083,000 in the red now, due, as I testified before, to drought, inoperation of these contracts, the reorientation of our program and what I call blood transfusions to try to keep these G. and T. gentlemen alive until some alternative scheme could be developed.

All I can tell the committee is that up until now the companies have not developed an alternative scheme that is acceptable to the cooperatives. I only know what the facts are. There is not one developed. Whether one will be, or not, I cannot answer.

I think the committees should inquire about this of the companies who assured them that there would be contracts to replace these where such contracts are and the G. and T.'s can tell the committee if they have any chance to make such contracts.

Chairman HAYDEN. What do you think about it Secretary Aandahl?

Mr. AANDAHL. It is no secret that I do not like the inoperative contracts. I think they throw the Government into a far more extensive program of power marketing than is necessary to market the hydroelectric energy that comes from these Federal projects. I think it can be marketed by other means in a manner that will make it available to the people of the area, to the full advantage of the Government contribution that can be made. I recognize, however, that the contracts are workable contracts if the Government is to get into the power business to the extent that is provided in those contracts. If it is the decision of Congress that the contracts should be reactivated, we will do the best that we can to reactivate them.

I do know that our rate schedule A, which is provided for in these contracts and which is subject to adjustment from time to time, as costs and operation expenses modify from time to time, I know that this rate schedule A is going to be much higher than it was at the time the contracts were drafted. As I recall, the contracts, or the rate schedule A that was in effect when the contracts were drafted, has a rate of about 5½ mills at the load factor that the cooperatives would be using.

Is that correct?

Mr. WRIGHT. About 5.6;

Mr. AANDAHL. Without calculating the expense of putting the inoperative contracts into effect, we have filed a rate schedule with the Federal Power Commission to replace the 5.6 by a rate that is 7.16. I felt that in filing that rate of 7.16 we were skimping and pinching a good deal, and that we were going to have difficulty to justify a rate that low before the Federal Power Commission.

Now, then, if we put these inoperative contracts into effect and take the additional expense that goes with them, I know that a rate that we can justify before the Federal Power Commission is going to be above the 7.16. And whatever that rate will be—and I would not want to forecast an exact figure of what it is going to be—but whatever that rate is going to be I think is going to be one that the ultimate integration contracts that are being negotiated at the present time would not be too far away from.

However, I recognize that from a standpoint of the relationship of the Government to the people in the area, we have the obligation of a signed contract, and it is a pretty delicate thing to deal with. Like I said this morning, it is one of the most difficult problems that we have had in the Department of Interior. And I express these opinions only so that the committee can have before it my best judgment on what we have to deal with.

We in the Department of Interior can do nothing else but recognize the contracts. We would have done nothing else 2 years ago if we had the appropriation that is necessary to implement the contracts.

Incidentally, I do not know of any contract that we have in the Department of Interior where the contract itself is tied in more closely, by a clause in the contract, with appropriations by Congress. So Congress has pretty broad authority here to make the decision as to what should be done.

But we do have a contractual obligation here that we just cannot run away from at the drop of a hat.

PURCHASING OF G. AND T. TRANSMISSION LINES

Chairman HAYDEN. I would like to ask Mr. Wright at this point: The House committee in its reports instructs the Department to make certain changes in these contracts. The first change is to delete any provision giving the Government an opportunity to purchase the G. and T. transmission lines or other facilities. In your opinion, is that change in the interest of the Government?

Mr. WRIGHT. I think that change would not be objectionable to the Government. I think some allowance ought to be made if the change is made in order to properly secure the approval of the Comptroller General in making the change.

Senator THYE. Would you care to elaborate or explain what those are?

Mr. WRIGHT. Yes. I think the change probably should be that the cost of replacements in the line, if the Government is not going to option to purchase, that the cost of replacements probably ought to be borne by the cooperatives instead of being a part of maintenance and operation. It would not be a very large item, I believe, for some time to come.

Chairman HAYDEN. Are you anticipating trouble with the Comptroller General?

VESTED INTEREST IN TRANSMISSION LINES

Mr. WRIGHT. I do not know whether the Government has acquired a vested interest in those lines, or not, through the operation of these contracts. If they have acquired a vested interest, I do not believe you can amend the contract to give up that vested interest, unless it can be determined that the amendments does something else that counteracts it to the extent that it is in the benefit of the Government to amend the contract. I do not anticipate any trouble if you make some allowance of that character.

Senator THYE. How could the Government have obtained a vested interest in there; in which manner?

Mr. WRIGHT. If they have made any lease payments which contributed to the repayment of the principal cost of this line. Under this clause of the right to the option to purchase, the Comptroller General might rule that they have acquired a vested interest to the extent of the lease payments that had been made.

Senator THYE. But as Administrator, what would you say to that question?

Mr. WRIGHT. I would say that if we had acquired any interest, it would be very, very small.

Senator THYE. Then would not that be about what you would advise the Comptroller General?

Mr. WRIGHT. Yes.

Senator THYE. Because he, after all, would have to go to you and then check the financial contribution?

Mr. WRIGHT. That is what I would advise him, that I think they could be amended, I think they should be amended, because the cooperatives desire it and the Congress desires it.

They were put in in the first place to avoid criticism of Southwestern Power paying a lot of money for facility and then not getting it. And nothing I ever put in the contract brought so much thunder on our poor beat-up head.

G. AND T. MAINTENANCE OF TRANSMISSION LINES

Chairman HAYDEN. The second change suggested in the House is that the G. and T. cooperatives maintain their own transmission system under lease to Southwestern. As I recall, the original contract required the Southwestern Power Administration to operate and maintain the transmission facilities. In your opinion, is it in the interest of the Government for the G. and T.'s to operate and maintain these facilities if they are under lease to the Southwestern Power Administration?

Mr. WRIGHT. I think it is possible that that can be done. The basis on which the operations are carried out and the reimbursement that would be made for the operation, which I assume the House committee had contemplated would be in the form of a credit on the power bill, because there is another section in there that says you shall deliver power at their load centers at the basic, SPA rate. I think that would have to be matter of negotiations. And I think the contract providing for the physical operation and maintenance by the cooperative would have to have enough supervision by the Government that the Government was assured it got what it was paying for.

I am not sure whether Government wage rates would go into such a contract, or not, but they well might go into it. It represents some problems.

Chairman HAYDEN. What do you think about it, Mr. Aandahl?

Mr. AANDAHL. I think an arrangement of that kind can be worked out, but I recognize that there are some problems and I would have to advocate a great deal of attention.

Chairman HAYDEN. Can the G. and T. operate these facilities with the same amount of money that the Southwestern Power Administration could?

Mr. WRIGHT. You have 5 entities doing an operation here, with 5 different supervisions, that otherwise would be done by 1. I think they probably could operate as cheaply as Southwestern Power Administration. I think the contract, to protect the interest of the Government, should be based on a situation where the Government required them to do it as cheap as it could, or the Government should do it itself.

Chairman HAYDEN. Do you mean have an alternative in it?

Mr. WRIGHT. No, not an alternative. But, in other words, if we estimated it was going to cost us $15 a year to maintain and operate it, that is all we should be willing to pay them.

Chairman HAYDEN. Do you think they could do it as cheaply as you could?

Mr. WRIGHT. I think they could. I do not know whether they would, or not. They could hire the same people we could, and assuming they paid the same wage rates and assuming that they did not have any more supervision in administration in all 5 units than we had in 1, they ought to be able to do it as cheaply.

Chairman HAYDEN. Do you think it could be worked into a satisfactory arrangement?

Mr. WRIGHT. Yes, sir.

Chairman HAYDEN. How long would it take to amend the contracts? You cannot start in on July 2 and take this thing over.

Mr. WRIGHT. No, sir. I think the amendment of these contracts would take a rather considerable interval of time. I think that the suggestions of the House require rather complete revisions of the total contracts. I think it would take quite a little time. You would have to do them one at a time. You probably would have some argument by the cooperative about which man was going to be the first in line to get it done. We probably would prefer to do it with a certain one, and that is probably who it would be done with. But in doing all five of them there would be quite a little time interval.

Chairman HAYDEN. How are you going to handle it between the time this law goes into effect and you actually make the contracts?

Mr. WRIGHT. As the House proposed it, there is no provision made for that. In other words, the minute the President signs the bill, you are in the ball game, Charley. We would have to start operating these things if the House had provided enough money to do it; which they did not. $684,000 is not enough money to maintain and operate these lines. A reasonable fluctuation I don't believe would change the $684,000 to $1,729,000, which I think would be necessary if you maintained and operated them through the whole year. You would have to do it the next morning, just like we had to move off. We probably would not do a very good job for 2 or 3 weeks, but we would do it.

Then if we amended the contracts for the cooperative to take over the operation back, I suppose we would fire all the crews we had hired in the interim and dispose of the equipment again. Apparently the solution was not thought of in the House.

The Secretary this morning suggested to the committee that these contracts not be reactivated until the amendments had been made, based on the House suggestion, or in line with the House suggestion.

Now, I want to say, as far as I am concerned, I consider the House suggestion to be a very general direction and not covering the specific terms of a contract. Those would have to be negotiated.

Chairman HAYDEN. Would it be advantageous to you, then, first, to put more money in, and, secondly, to so state in our report how the transfer from one situation to the other could be carried out?

Mr. WRIGHT. If the cooperatives are going to physically maintain and operate these systems during the next year, instead of $684,000 the Southwestern Power Administration, in my judgment, will need a minimum of $1 million. In other words, when you reactivate these contracts you impose upon us a tremendous administrative burden of contracting, of negotiations, of constant working with the generating and transmission cooperatives to see that the terms of whatever contracts we do finally come up with are carried out after they are signed. That $1 million would give us enough money to do everything but physically operate their lines.

Then we would need, before we actually started operations under the amended contracts, we would need to amend them. So as the Secretary suggested this morning, it seems to me—I might say I am like you, I saw it the first time this morning, he had been off being bombed and I have been on the highway dodging them—that language contemplates that instead of reactivating the contracts the second the President signs the bill, that they would not be reactivated until the amendments had been made. I recognize—and I am going to state it, whether the people here like it, or not—that that amending of the contracts is something nobody can make anybody do, and it depends upon the good faith of the parties concerned so that you would proceed expeditiously with amending the contracts. And I am sure the Department would intend to proceed so, and I am sure this committee would expect us to proceed so with them, and I trust that the generating and transmission cooperatives would want to proceed expeditiously with it.

AMENDING THE CONTRACT

Senator THYE. When you say amending the contract, just what do you propose by that?

Mr. WRIGHT. Just what the committee suggested, that we amend the contract to remove the option to purchase vested in the Government, we amend the contract to provide that the lines operated by the generating and transmission cooperative——

TOTAL GENERATING AND TRANSMISSION COOPERATIVES

Senator THYE. How many members do the generating and transmission cooperatives have in their organization?

Mr. WRIGHT. There are 5 of them, and I believe each 1 of them averages about 8 or 10 electric distribution cooperatives.

Senator THYE. They were the cooperatives organized throughout those areas, comprised of the two seats?

Mr. WRIGHT. That is right, Senator.

Senator THYE. And they were organized to distribute electricity to their member cooperatives?

Mr. WRIGHT. Yes, sir.

Senator THYE. And they had joined together in order to establish a cooperative transmission line to wheel the current from the hydroelectric generating installations to areas where the consumers' cooperatives tapped?

Mr. WRIGHT. That is correct.

Senator THYE. And you now say that you have to amend the contracts. Would that be changing the conditions that the Government had entered into in previous contracts, or what?

Mr. WRIGHT. Yes, sir.

Senator THYE. Would there be such a thing as the Government defaulting on what they had one time committed themselves to?

Mr. WRIGHT. The Government has already done that.

Senator THYE. The Government has defaulted?

Mr. WRIGHT. Yes, sir. Not defaulted in the sense of violating a contract, but the Government, under the terms of the contract, there was not liability in the Government, if the Congress did not make appropriations. So the contract became inoperative when Congress cut off appropriations.

Now, there were 5 generating and transmission cooperatives, and 3 of those 5 not only built lines but built thermal generating stations, which was to integrate with the Government's power production. In order to achieve that integration, all of the power was placed in one pool and then service given to all of them out of that pool, and the Government was to be the integrating agency. Included in the arrangements was the provision that the Government could purchase the transmission and related facilities for whatever cost remained to be paid on them at any time during the entire life of the lease and for $10 after the lease had expired.

Congress disapproved it, and two provisions of those contracts in hearings prior to this year. One was they did not like the option to purchase, and the other one was that certain members of Congress thought that the transmission facilities that belonged to the cooperatives ought to be operated by the cooperatives. In order to meet those objectives, it has been suggested in the House committee report, as I understand it, that the existing contracts be amended to eliminate the option to purchase and to provide that the cooperatives maintain and operate the lines which they have leased to the Government and that the Government reimburse them for that operation by making some form of credit allowance so that the same case rate will be available to load centers of electric distribution cooperatives throughout the area.

Now, I think those contracts can be so amended. I think the operations can be carried out on that basis. But the thing that I have been discussing with the chairman is: What do you do from the minute the law is approved until you get these amendments put in?

Now, the way the House bill is drawn: We take them, then we try to amend the contracts, and then we give them back again; which, of course, to my way of thinking, without criticism of the House, simply is going to be a very difficult thing to do.

Chairman HAYDEN. Upon the other hand, if we say that you wait until the amendments have been made and then make the switch, that would save a lot of trouble, would it not?

Mr. WRIGHT. That would give us the time. And as I pointed out to the committee, that is all right if there isn't some "skunk" that would not make an amendment.

Senator THYE. How could you make an amendment?

Mr. WRIGHT. If the two parties agreed to amend the contract, eliminating the option to purchase.

Senator THYE. Who would the two parties be?

Mr. WRIGHT. The Southwestern Power Administration, and generating and transmission cooperatives.

Chairman HAYDEN. Five of them?

Senator THYE. But if the Congress spelled it out, they could not do very well other than what the Congress had spelled out, could they?

Mr. WRIGHT. This direction is contained in a committee report of what the intent of Congress is as to the implementation of these contracts. I think it is a rather general direction. I do not think it specifically changes the status of the flood control act, which vest certain responsibilities and authorities in the Secretary, and which I do not believe can be changed by a committee report of the Congress of the United States.

Mr. AANDAHL. Mr. Chairman, may I just comment?

Chairman HAYDEN. Yes.

EXTENDED NEGOTIATIONS REQUIRED

Mr. AANDAHL. In working out an amendment of that kind, there are many questions of values and payments that have to be worked out in detail, even when you have the general principle. So there is much to be negotiated to make those amendments work.

Chairman HAYDEN. Can you make any good guess as to the time it is going to take to do that, just offhand?

Mr. WRIGHT. I think we could probably get the first arrangements done within a month and probably the others in the next 2 months, 3 to 4 months.

Chairman HAYDEN. In the first month if you got a pattern, you could get the rest of it cleaned up?

Mr. WRIGHT. All you have to do, as I say, is to find some "skunk" in this, and that time schedule goes haywire.

Chairman HAYDEN. If they all play ball, you are all right?

Mr. WRIGHT. That is right. That is exactly the point I want to make, Mr. Chairman, that if you are going to leave an interval here in which amendments are to be made in these contracts, it depends on the cooperation of everybody here. In other words, I do not want to come back to this committee 2 years from now in the same position as I believe companies are now and say we still do not have the contracts. I do not want to be in the position the power companies are now in.

Chairman HAYDEN. Whatever this cost would be, would that be paid out of a continuing fund, and you think the amount of money the House allowed is not enough?

Mr. WRIGHT. The rentals for transmission lines and the cost of purchasing power, $6 million is estimated to be adequate. As a matter of fact, I think it is definitely ample.

The actual allowance for the cost of the generating and transmission cooperatives, of maintaining and operating their systems, would have to be in the form of a credit on these contractual relationships of the payments of one to another, because there are no funds provided in this bill for the payments of the physical operations. If we are to actually pay them in cash, then I think the appropriation would have to be $1,729,000.

Mr. AANDAHL. Just a moment. May I say that that is instead of the $684,000, and is separate from the $6 million.

Chairman HAYDEN. Yes.

Mr. WRIGHT. Then instead of allowing a credit on the part of that $1,729,000, I estimate that about $610,000 would roughly be the payment for maintenance and operation up to the 5 generating transmission companies.

Chairman HAYDEN. If it is necessary to either change the text of the bill, or the committee report in that respect, can you prepare language for the committee to consider?

Mr. AANDAHL. Yes, we will be glad to do that.

SETTLEMENT ON BASIS OF NET BALANCES

Chairman HAYDEN. The third change suggested by the House committee is this:

> The SPA and the G. and T.'s will settle contracts for power purchased and sold on the basis of net balances as is done under existing contracts to which SPA and private utilities are parties.

Is this administrative matter, or will it require amendment of the contract?

Mr. WRIGHT. It will require amendment to the contract, but I think it is an excellent suggestion.

Chairman HAYDEN. It is an amendment that probably both parties will want to make?

Mr. WRIGHT. Yes, sir.

Chairman HAYDEN. You would not anticipate any difficulty about that?

Mr. WRIGHT. No. sir.

Chairman HAYDEN. If you settled on the net balances? How much will this reduce the amount required in the continuing fund?

Mr. WRIGHT. I do not know. Give me 1 year to find out. I have not any idea. But it will materially reduce it by the amount—it would reduce the expenditures out of the continuing fund by the receipts from the amount of power and energy that these people buy less their maintenance and operation costs. I think it is an excellent suggestion, Mr. Chairman.

POWER DELIVERED TO LOAD CENTERS

Chairman HAYDEN. The fourth change suggested by the House committee is:

That power and energy will be delivered to the load centers of all G. and T. contracting systems at the basic SPA rate.

What would be the effect of this provision? Would it have any effect on the amounts required in the continuing fund?

Mr. WRIGHT. No, not on the amount required in the continuing fund. But that is rather a broad-reaching provision, and I do not think it could be exactly achieved. We would strive toward that achievement with respect to four of the generating and transmission cooperatives as it was provided for in the original contract. The fifth generating and transmission cooperative, namely, the N. and W. Cooperative, in their present contract with the Government, we do not lease or operate their 69-kilovolt system. The reason for that was that their system was so remote from the Government's hydro project that it was never contemplated that any material amount of hydropower would ever be marketed over that system, little hydropower.

Actually, the integration provided is in the main for hydro standby for that system and a movement of power from that system south into the KAMO system from the thermal generation of power. Therefore, in the original contract we refused to lease or operate that 69-kilovolt distribution system.

However, I think that the committee intent might well be achieved there by this construction of their relationship. Practically all of the power and energy that this cooperative uses comes from their own thermal generating plants, because their present load is about 22,000 kilowatts and they have an installed capacity of 40,000 kilowatts. If they need more power, in my judgment, some day they are going to put in another unit.

If we take the production of that plant as the Government's purchase at cost of production and then credit that production with the per kilowatt-hour cost out of that plant on an integrated basis, then these people would be getting the advantages of integration, which would be, in my judgment, about a mill cheaper than the A rate. The power out of their own plants integrated would be about a mill cheaper than the A rate, and to put it specifically, 7½ as against 6½ mills. I think their generating per kilowatt-hour cost on an integrated basis would be about 6⁴⁄₁₀ mills. If the A rate is 7½, they would be getting about a mill cheaper power by using their own power after it is integrated with the Government system. To that extent, they would be getting that advantage over those systems which we are lease operating, and I think can achieve somewhat the objective the House stated.

Chairman HAYDEN. What I am getting at is: Is it going to be necessary for mention to be made of this fifth situation in the Senate committee report?

Mr. WRIGHT. I think that the fifth situation is certainly different from the other 4, because we were leasing and operating 4 systems and we were not the fifth system.

Chairman HAYDEN. The facts that the House stated do not exactly fit the fifth one. We ought to be cognizant of that fact.

Mr. WRIGHT. I think that is right, Mr. Chairman. We are sympathetic with their situation. I think there is a way to correct it a little bit different than the House suggested was their intent.

COMPLIANCE WITH HOUSE SUGGESTIONS

Chairman HAYDEN. As administrator of the Southwestern Power Administration, do you feel that you can comply with all the amendments suggested by the House and still have an efficient operation?

Mr. WRIGHT. Yes, sir; I do; with the statement that you provide in lieu of the $684,000, $1 million for maintenance and operation.

STAFF REDUCTIONS

I would like to say this about Southwestern Power. You probably hear about how much people have cut down. You have not heard anything until you have heard about Southwestern Power. We had a staff of 196 people, we now have a staff of 93. We are operating in 375,000 square miles, serving part or all the power requirements of some 1,650,000 people.

Senator THYE. How long a time have you been in making that adjustment?

Mr. WRIGHT. About a year and a half, Senator.

Senator THYE. Where have you been able to accomplish the economy or savings in man-hours?

Mr. WRIGHT. We accomplished it by contracting all of the operations which were carried out to the minimum possible necessity scale. In other words, we have gone right down to rockbottom with it, on the basis that we were going to have large contracts, alternate contracts, in lieu of our relationship with the generating and transmission cooperatives.

Senator THYE. Have you impaired or endangered either the serviceability of the line, or the type of service you render?

Mr. WRIGHT. Not if we substituted the alternate contracts.

Senator THYE. Now, there is an "if" in there about which I do not know anything.

Mr. WRIGHT. We do not, either, Senator. We do not know which way we are going.

Senator THYE. I know that. But you have made reductions, and I am trying to find out where and to whom we give the credit. You bring an "if" in and I am trying to surmount or get over that "if" and find out what is involved in that.

Mr. WRIGHT. I think you should give the credit to the Secretary of the Interior and his reorganization plan, in which he suggested that the activities carried out by Southwestern Power be reduced to an absolute minimum.

Senator THYE. What were those activities, in the type of service, or in the type of administrative assistance? What was involved there that you were able to eliminate without impairing the function or the serviceability of the transmission units?

Mr. WRIGHT. The thing that was eliminated, I would say, was an active, a much more active part in the utility operations of the Southwest than that which we are now carrying on. I would say also it is probably due to the assuming of a lot more workload by some of the

people who are left. My normal travel day will include 600 miles of driving and 3 or 4 meetings.

Senator THYE. You look pretty physically good for that kind of abuse.

Mr. WRIGHT. I used to have pretty dark hair.

Senator THYE. 600 miles is an awful long way.

Mr. WRIGHT. I have done 720 and made 3 speeches in 1 day.

Senator THYE. I have too, but I wobbled a little.

Mr. WRIGHT. I am wobbling about a bit, too.

The other things which we did, which the Secretary just directed my attention to: We were engaged in quite a large construction program with this 196 staff. And that construction program has been practically brought to conclusion.

Senator THYE. The reason I have asked these questions is that I have heard the Southwest debated and discussed. I have heard it across this table as well as subcommittee tables, and I am just trying to get as much light on the question and as much understanding as I can, because the thing seems to be about a five-ring circus, there has not been any end to it.

Mr. WRIGHT. That is correct, and we have had a lion in every ring.

Senator THYE. And I am hoping just now that I can see some sort of end approaching for the future. That is what led me to ask the question.

Mr. WRIGHT. I am delighted that you have asked the question of how we have been able to do this. Whether or not we will be able to maintain them depends on which direction this power program goes.

In other words, I hope you gentlemen realize there are many expenses over which we have no control. In other words, a Senator or a Congressman can in 5 lines, give us 50-man days of work.

Senator THYE. How? I have never been so successful.

Mr. WRIGHT. By a request such as: "Please send me a complete report on what the Southwestern Power Administration proposes to do about the generating and transmission cooperatives."

Senator THYE. Once you have made up the report, however, you can all use the same reply?

Mr. WRIGHT. No, you can never use the same reply, because each one wants the information in a little different form than the man who asked for it the day before.

In addition to that——

Senator THYE. I am absolutely sincere in this, that I have heard the Southwest before I came here, and I have heard it every year that I have been here. I am hoping that we could get the Southwest on one track so that it will be going in a straight direction instead of in a circle all the time.

Mr. WRIGHT. Mr. Senator, there is nobody agrees with that any more than I do.

Chairman HAYDEN. There is one other provision in this committee report of the House that I want to ask you about:

> The Department is also instructed to provide for the recapture for the use of preference customers all power and energy to which they are entitled under the provision of section V of the Flood Control Act of 1944, and to negotiate as soon as possible a settlement with each contracting G. and T. Cooperative effective as of the date of the passage of the bill.

Mr. WRIGHT. There are two things there, Mr. Chairman. The first one is, I think that the power and energy, exclusive of the alumi-

num contract which was made with the Arkansas Power & Light Co. and Reynolds Metals Co., already have complete recapture provisions in them. They are exchange contracts in which we get more power and energy to sell than we would if we operated independently in the case. I think we have already done the first part.

In the case of settling the accounts with the generating and transmission cooperatives, that assumes, I guess, that we have unsettled accounts, which I believe we have not with anybody except the Central Cooperative at Jefferson City. Those accounts have been turned over to the Comptroller General for final settlement, and I am sure he will do an expeditious job of settling them.

Chairman HAYDEN. You do not anticipate much trouble about it, do you?

Mr. WRIGHT. In the case of Central, they will have to settle with the Comptroller General, because the accounts were in litigation and were referred by the certifying officer to him for settlement.

Chairman HAYDEN. Suppose this committee directed you to continue interim contracts for 2 months and then, if the existing contracts have not been amended then the G. and T. contracts become effective whether amended, or not. How could we work out something like that? Do you need a slack period of time like that to help you?

Mr. WRIGHT. I would say do it in 2 months, or else. And it would work exactly that way. If we did not get them amended in 2 months, then we would have to be restored without amendment. So far as I am concerned, it could be done, yes.

Chairman HAYDEN. Would it be any advantage to you in having a statement like that, or would you just rather take it the way you suggested?

Mr. WRIGHT. I think the Department's suggestion that this committee trust the people involved in this to amend the contracts before they are implemented is sufficient. I think the committee could well ask us to report progress on this to you. I expect some commotion in the negotiations, and disagreement. It would not be negotiation if there were not. I think the committee, if it was not done in accordance with your desires, would probably have plenty of opportunity next year to castigate us and the G. and T.'s, both.

Chairman HAYDEN. Senator Monroney, would you like to ask any questions, from down in your country?

Senator MONRONEY. I do not have any at this time, Mr. Chairman.

Senator THYE. Mr. Chairman, I wonder if the Senator may have something to say at this time.

Senator MONRONEY. No; I think I am testifying Monday.

Senator HAYDEN. Senator Dworshak?

Senator DWORSHAK. No questions, Mr. Chairman.

Chairman HAYDEN. Does either of you gentlemen have anything further today?

Mr. AANDAHL. I have no comment. I understand you wish us to work out some language as you suggest here. I think we will work that out with the committee clerk.

Chairman HAYDEN. All right. If that is the case, thank you gentlemen.

The committee will stand in recess until 10:00 o'clock Monday morning.

(Thereupon, at 3:55 p. m., Friday, June 17, 1955, the Committee recessed to reconvene at 10 a. m., Monday, June 20, 1955.)

PUBLIC WORKS APPROPRIATIONS, 1956

MONDAY, JUNE 20, 1955

UNITED STATES SENATE,
BUREAU OF RECLAMATION, AND
INTERIOR POWER MARKETING AGENCIES,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10 a. m., in room F–39, The Capitol, Hon. Carl Hayden, chairman of the subcommittee, presiding.

Present: Chairman Hayden, Senators Ellender, Young, Mundt, and Dworshak.

DEPARTMENT OF THE INTERIOR

SOUTHWESTERN POWER ADMINISTRATION

OPENING STATEMENT BY CHAIRMAN

Chairman HAYDEN. The committee will be in order.

The committee meets this morning to consider provisions in the House bill appearing on page 7 of the bill pertaining to the Southwestern Power Administration.

The reasons for the adoption of these provisions are set forth in the House report on the public works appropriation bill, at pages 5 and 6, and I will have the statements in the House report included in the record at this point.

(The information referred to follows:)

DEPARTMENT OF THE INTERIOR

Southwestern Power Administration

Appropriations, 1955	$2,165,000
Estimates, 1956	1,134,000
Recommended, 1956	684,000
Comparison:	
Appropriations, 1955	−1,481,000
Estimates, 1956	−450,000

Operation and maintenance.—A reduction of $450,000 below the budget estimate of $1,134,000 has been made by the Committee. This reduction represents the amount budgeted for the purchase of energy and the payment of wheeling charges under existing contracts with private utility companies and cooperatives in the area. Funds for this purpose have been made available through reactivation of the continuing fund discussed in the following paragraphs.

Continuing fund.—The continuing fund language has been inserted in the bill in the same manner in which it last appeared in the appropriation bill for the Department of the Interior for the fiscal year 1953. It provides that the SPA shall have authority to use power sales revenues, subject to an annual limitation placed in the appropriation bill, to pay for emergency expenditures, purchase of electric power and energy, and rentals for the use of transmission facilities. This action makes it possible to reactivate valid and legal contracts which certain G. and T. (Generating and Transmission) cooperatives have with SPA. These contracts at their inception were examined by the Congress and funds were available to carry them out through the Continuing Fund for fiscal years 1950 through 1953.

The contracts in question have been tested in the courts. Ten private utility companies filed suit, attacking the legality of the contracts, in the United States District Court for the District of Columbia. The District Court handed down an opinion on June 17, 1953, upholding the legality of the contracts. The companies appealed this decision. The Court of Appeals for the District of Columbia on April 28, 1955, held that the companies had no standing to sue and directed the District Court to dismiss the companies' suit.

The G. and T. Cooperatives originally borrowed approximately $70 million from the Rural Electrification Administration for construction of system facilities on the security of their contracts with the Southwestern Power Administration. Operation of these contracts was suspended during the past 2 years because of action of the Congress in withholding the use of the continuing fund to implement them. This action placed the G. and T. cooperatives in a precarious financial situation for which relief has been sought through negotiations with private utilities in the area looking to integration of the G. and T. systems with the systems of the companies. These negotiations have not as yet resulted in contracts which would provide the G. and T.'s with necessary income from their several powerplants and facilities in order to retire the REA loans.

In reactivating the contracts with the G. and T. cooperatives, the Department of the Interior is instructed to delete any provisions providing for the option to purchase G. and T. transmission lines or other facilities by the Southwestern Power Administration. The contracts are also to provide: (1) That the G. and T. cooperatives will operate and maintain their own transmission systems under ease to the SPA; (2) that the SPA and the G. and T. cooperatives will settle accounts for power purchased and sold on the basis of net balances as is done under existing contracts to which SPA and private utilities are parties; and (3) that power and energy will be delivered to the load centers of all G. and T. contracting systems at the basic SPA rate.

The Department is also instructed to provide for the recapture for the use of preference customers all power and energy to which they are entitled under the provision of section 5 of the Flood Control Act of 1944, and to negotiate as soon as possible a settlement with each contracting G. and T. cooperative effective as of the date of the passage of the bill.

The amounts provided in the bill for both operation and maintenance and the continuing fund are based on information at hand. However, since there was considerable variation in the informal estimates offered during the hearings as to SPA costs under the reactivated contracts and since the nature of the amendments to the contracts could affect the amounts required, it is recognized that some adjustment may be necessary at a later date.

Chairman HAYDEN. Senator Kerr of Oklahoma, who is expected to be here, has been unavoidably detained. He advised me that he will file a statement tomorrow with regard to the bill and that statement will appear at this point in the record.

(The statement referred to follows:)

STATEMENT OF SENATOR ROBERT S. KERR IN SUPPORT OF APPROPRIATIONS FOR THE SOUTHWESTERN POWER ADMINISTRATION

Mr. Chairman and members of the committee, I appreciate the opportunity of submitting to you a statement relative to appropriations for the Southwestern Power Administration and the contracts between them and the G. and T.'s of the area.

I am grateful for the action taken by the House Appropriations Committee and the House in approving the funds for the Southwestern Power Administration and reinstating the continuing fund. I hope that your committee can accept the language in the House bill without modification as it pertains to the continuing fund, in order that the item will not need to be considered in conference.

I am convinced that the operation and maintenance figure of $684,000 contained in the House bill should be increased to $1 million to provide for the additional expense for the administration of the expanded job of taking care of existing customers of the Southwestern Power Administration as well as the G. and T. contracts.

The Committee has all of the information that it needs for appropriate action on this bill. You have heard from witnesses before your committee this year and for years previously that these are good contracts, which were approved by the Congress upon the recommendations of the Department of the Interior and the Rural Electric Administration of the Department of Agriculture. They are still good contracts. They were made inoperative by the Congress on the basis of suggestions made by the private utility companies, as evidenced by language in House Report 314, 83d Congress, page 38, as follows:

"*Continuing fund, Southwestern Power Administration.*—An appropriation of $5,650,000 was requested for this item. The committee has allowed $150,000, a reduction of $5,500,000. The amount allowed is to be used for the purchase of power and for the payment of wheeling charges under existing contracts.

"In a letter dated April 6, the committee was advised by the chairman of the executive committee of the Southwestern Power System that the member companies in that system saw no need for the continuing fund appropriation, and assured the committee that the deletion of such fund would not in any way result in interruption or curtailment of service to any preference customer or other consumer on their systems. In his reply dated April 14, the chairman of the subcommittee advised the member companies of the Southwestern Power System that if the committee took such action, it would be due in part to this commitment made by the member companies in their letter and at the time of their appearance before the subcommittee on March 31, 1953."

Every effort has been made by the G. and T.'s to reach a contract agreement with the private utility companies. However, this effort has failed. In the meantime, the legality of the contracts between the G. and T.'s and the Southwestern Power Administration has been determined by the courts, in such a way that there is finality to the extent that no other court will accept jurisdiction in the matter.

If the contracts are not reactivated, then the Congress of the United States will be responsible for failure and probably bankruptcy of approximately $70 million worth of electric properties now owned by the G. and T.'s. The G. and T.'s cannot "go it alone." Their facilities were designed to integrate with the hydroelectric power, marketed by the Southwestern Power Administration, generated at multiple-purpose dams in the Southwest. The integration proposed by the Government was the basis of the loans to the G. and T.'s, and was the basis for the established rate to preference customers in the Southwester Power marketing area.

A statement has been made before your committee that the deficit of the Southwestern Power Administration presently is about $6 million, and if these G. and T. contracts are renewed, that the deficit will continue. I would like to point out, Mr. Chairman, that the deficit was created while the Southwestern Power Administration was selling power under contracts with the private utility companies, the very people who are crying because the Government is going in the hole in their power deals. During this time the G. and T. contracts were inoperative. It is my understanding that evidence indicates that, if these contracts are reactivated between the G. and T.'s and the Southwestern Power Administration, then the Southwestern Power Administration can amortize the investment that the Government has in the hydropower facilities with a reasonable rate of interest, and at the same time allow the G. and T.'s to repay their obligations to the Federal Government. Without G. and T. contracts, the Southwestern Power Administration will continue to operate at a deficit.

For these reasons, I recommend to your committee that they follow the action taken by the House in renewing the continuing fund which automatically puts back into force and effect the contracts with the G. and T.'s. It is possible that a number of the suggestions made in the House report will require time to work out adjustments in the present contracts. None of these are insurmountable, and, in fact, provisions in the contracts to be reactivated are amply broad to provide for just such adjustments as will be necessary. I hope the contracts can be immediately reinstated, and that the adjustments for operation and maintenance, which can be accomplished by negotiation, can be effective July 1, 1955.

Chairman HAYDEN. Senator Monroney is here, and we will be glad to hear from you, Senator.

STATEMENT OF HON. A. S. MIKE MONRONEY, A UNITED STATES SENATOR FROM THE STATE OF OKLAHOMA

ADEQUATE POWER AT REA LOAD CENTERS

Senator MONRONEY. Thank you, Mr. Chairman, for this opportunity to be here on a matter that is of prime importance to the State of Oklahoma. Nothing is as important to our agricultural communities as maintenance of an adequate and economical supply of power at the load centers of our REA's. I know you are anxious to complete these hearings in some 30 minutes for each side, and I will not bore you with the story of the SPA and the contracts. You have had those before you since 1949, and perhaps know as much about them as anyone.

I might mention that you are fully familiar with how they became inoperative by Congress denying and repudiating its obligation to carry out the appropriation of funds, and the continuation of the continuing fund to keep those contracts going; how these contracts which were tested in the courts have been upheld every time, and how the House has now by its action ordered them reactivated through restoration of the continuing fund.

Needless to say, we are delighted at the action of the House. These are good contracts, and they are workable contracts as the Administrator of SPA has testified. Changes in the contracts to meet certain congressional objections have been directed by the House. I can assure you that those changes are approved 100 percent by the generating and transmitting cooperatives.

The contracts must be made operative if we are to protect the Government's investment of some $70 million in these G. and T. lines, and to allow the G. and T's. to meet the obligations which they incurred on the strength of those contracts.

Mr. Douglas Wright, the Administrator of SPA, has testified that he has insufficient power to meet the demands or preferred customers throughout this Southwest region. Immediate restoration of these contracts would give him the additional power from the steam generating plants of the G. and T.'s to satisfy the demand of municipalities and REA's and others of a preference nature for power to meet their summer peaks during the next 2 or 3 months.

POWER FOR AIR FORCE

The Air Force is negotiating with Western Farmers Electric, another G. and T., for power to supply the Clinton-Sherman and Altus Air

Force Bases in Oklahoma. Negotiations are underway at this very moment, and the only thing in question is the ability of Western Farmers to supply the estimated requirements for the Air Force.

Immediate restoration of these inoperative contracts, as they existed at time of cancellation, would be sufficient to insure the Air Force that Western Farmers, integrated with SPA, can provide the load required by these two bases. The quicker we can begin to supply current power demands, the quicker SPA can build up its load factors, thus assuring a sound operation. The quicker these contracts become operative, the less chance there will be of losing any of the potential power market in the Southwest. Otherwise, those who must have power will be forced to turn to other sources.

I might add since the interruption of these contracts many of the municipalities that were then ready customers for SPA and the G. and T.'s have provided themselves with some other sources of power. But we need to get busy now so that more of this market will not be lost, and we can build up again the operation as it was planned and passed by the Congress.

For example, the Air Force cannot wait 2 or 3 months longer to sign a contract. If we don't permit Western Farmers to serve this preference customer load, someone else will have to do it.

You will note that the House approved only $684,000 for the operation and maintenance of SPA. Assistant Secretary of the Interior Aandahl has testified that a slightly higher amount will be required when the contracts are made operative, and has suggested that $1 million is a more realistic figure.

We do not question Mr. Aandahl's recommendation on this additional amount, and urge that the committee follow his recommendation on that.

One other recommendation we take issue with was his suggestion that the appropriation bill carry limiting language providing that no part of the funds appropriated could be spent for carrying out the contracts until they be amended. We feel that these contracts should go into force with the passage of this bill, that the direction of the Congress should be made applicable to the existing contracts that were canceled by action of the Congress, and are hereby reinstated as they were in existence at that time; that there is language in these contracts that will make it very easy to adjust so that the directives of the House in providing for the operation of these lines by the G. and T.'s and the other features can be easily amended.

Mr. Chairman, I appreciate the opportunity of appearing before this committee, and representatives of the G. and T.'s are present, and are ready and anxious not only to make their statements but answer any questions the committee might have.

Chairman HAYDEN. Thank you for your statement.

STATEMENT FROM SENATOR SYMINGTON

Senator Stuart Symington advises us that he cannot be present, and he has a statement which will be included in the record.

(The statement referred to follows:)

STATEMENT BY SENATOR STUART SYMINGTON

Mr. Chairman, I appreciate this opportunity of presenting a very short statement in support of the $6 million allocation "from the continuing fund for all

costs in connection with the purchase of electric power and energy, and rentals for the use of transmission facilities" for the Southwestern Power Administration, as approved by the House, in Public Works Appropriation bill, H. R. 6766.

For the past 2 years, the Missouri generation and transmission cooperatives who have contracts with the Southwestern Power Administration, have been forced to operate their electric facilities on temporary short-term contracts.

It is my belief that the bill, as approved by the House, supported by the language in House Report No. 747, without any change, will correct the present unsatisfactory situation for all parties in Missouri.

In order to meet their obligations and serve their member-customers at a reasonable rate, the generation and transmission cooperatives and the rural electric cooperatives in Missouri need these contracts with SPA.

Therefore, to accomplish this purpose, I respectfully urge that the House Report No. 747 and House approved bill, H. R. 6766, be adopted without any language change, in order that these contracts may be reactivated as soon as possible after final passage of this bill.

STATEMENT OF SENATOR HENNINGS

Chairman HAYDEN. The committee has also received a statement from Senator Hennings. This statement will be included in the record.

(The statement referred to follows:)

STATEMENT BY UNITED STATES SENATOR THOMAS C. HENNINGS, JR., DEMOCRAT, OF MISSOURI IN BEHALF OF CONTINUING FUND FOR SOUTHWESTERN POWER ADMINISTRATION FOR FISCAL 1956

Mr. Chairman, I appreciate this opportunity to make a statement in behalf of the continuing fund for the Southwestern Power Administration for the fiscal year of 1956.

The members of this committee will recall that I have testified on this matter on numerous occasions because of its extreme importance to the people of my State of Missouri. It was with great gratification, therefore, that I learned that the House Appropriations Committee had recommended and the House had approved the restoration of the continuing fund in the amount of $6 million. In my judgment this step should go a long way to restoring faith in the United States Government's intentions of honoring its contractual obligations. The question involved in the SPA continuing fund is one with which all of us are familiar. Until recent years we were able to rise above partisan and sectional interests and appropriate the necessary funds to insure that the vital program of SPA could be carried on. At least this was the situation until 1953. At that time, however, pressure on the part of the private power lobby resulted in a change in congressional policy. The results of that change, I think, are well illustrated by the following excerpt from a letter which comes from Mr. Truman Green, manager of the Central Electric Power Cooperative in Jefferson City, Mo.:

"Let us call your attention to a situation which, if not corrected promptly, will leave a blot upon the escutcheon of our Government. Early in 1950, five of our generation and transmission rural electric cooperatives in Missouri and Oklahoma entered into 40-year contracts with Southwestern Power Administration (SPA) an agency of the Department of the Interior, for their power supply. Upon the security of these contracts, the cooperatives borrowed $70 million from the Rural Electrification Administration (REA) to construct transmission lines and steam generating plants to comply with their obligations under these contracts.

"As the facilities of these cooperatives were completed, SPA assumed its obligations under the contracts and carried them out until July 28, 1953. Owing to a statement of the managers for the House in the conference report for that year, SPA withdrew from the contracts. The cooperatives were then encouraged by the Government to negotiate substitute contracts with the private utility companies in their respective areas. The thought was that, if contracts equally satisfactory to the cooperatives could be negotiated with the private companies, it would not be necessary to reactivate the contracts between the cooperatives and SPA.

"The cooperatives spent 18 months trying to negotiate substitute contracts without success, except possibly in one instance. They believe they have exhausted all possibilities of a substitute contract, and now find themselves on the

brink of bankruptcy owing to the failure of the Federal Government to honor its contracts with them. Although some relief has been given by the Government in the form of short-term 'interim' contracts, this relief has been totally inadequate to meet the needs of the cooperatives.

"The cooperatives believe that the only solution is for the Federal Government to honor the contracts it has with them. We have agreed to eliminate the lease and purchase option of our transmission lines when the contracts are reactivated. The House and Senate Interior Appropriations Committees have been requested to reactivate these contracts by restoring the continuing fund of SPA.

"To put the existing contracts back into effect will not require any appropriations but only the restoration of the continuing fund, which provides, out of SPA revenues from power sales, the funds necessary to carry out the contracts."

To illustrate the importance of these contracts to the State of Missouri, I would like to point out that unless we appropriate adequate funds for SPA to carry out its commitments to the generating and transmission co-ops, the municipalities, and privately owned utilities, we will be causing unnecessary hardship to close to one-half a million people in my State alone. Some 250,000 of these people are members of rural electric cooperatives which, through the G. and T. co-ops, have contracts with SPA. The other 250,000 people are residents of Missouri communities which purchase electric power from SPA.

The members of this committee will recall, I am sure, that in 1953 the private power companies made the argument that the continuing fund was not necessary in order to supply power "to any preference customer or other customer on their systems." What they did not say is that there are large areas in the State of Missouri which are not on their systems nor anywhere near their systems. There are several counties in our State in which there is not a single commercial power company line of any size or description. In other counties the lines that do exist are so small or inadequate that they can only be described as "fringe lines." Throughout western and southern Missouri the rural electric systems, either through their local distribution co-ops or through their G. and T. co-ops have built a great many lines to supply themselves with needed electricity. Some of these are as large as the 154-kilovolt line constructed through Missouri and down into Missouri Arkansas Ozarks area where they connect with the SPA lines emanating from and connecting with the multiple purpose dams. In other words, it is clear that no wheeling contracts made by the private power companies with SPA could eliminate the need for the lines already constructed by the co-ops nor could they do away with the need for that portion of the continuing fund required for SPA to carry out its contracts with the farmers' cooperatives.

One further point I would like to make, Mr. Chairman, is this. At the time that Congressional policy changed and the continuing fund was eliminated, and since that time, there has been considerable discussion as to the legality and validity of the contracts entered into by the G. and T. cooperatives and the SPA. The legality of these contracts is no longer open to question as the result of two court decisions. In a suit brought by ten private utility companies, the United States District Court for the District of Columbia ruled on June 17, 1953, that the contracts were legal. A subsequent decision handed down on April 28 of this year by the Court of Appeals for the District of Columbia again upheld the legality of the contracts and directed the District Court to dismiss the suit filed by the private utility companies.

Still another point that I would like to stress, Mr. Chairman, is that the continuing fund does not actually involve any expenditure of funds out of the Federal Treasury. It is, as we know, better described as a revolving fund because the money used for the purchase of power and lease rentals comes back to the Treasury in the form of revenue derived from the sale of that power. Moreover, we must remember that the funds for the operation of the continuing fund do not come out of the pockets of the American taxpayers, but instead out of the operating revenue of SPA.

As I stated earlier, Mr. Chairman, I was indeed gratified that the House acted to restore the continuing fund and I earnestly hope that this committee in its wisdom, and the Senate will likewise approve the restoration of this important item. Not only will this restore faith in the integrity of a contract with the United States Government but it will indicate that we are not abandoning the REA program which has meant so much to the productivity of our entire Nation and to the well-being and better living of rural families and communities throughout America.

Among the many communications I have received on this subject are several which I would like to have included in the hearings. These are: a resolution signed by the members of the Rural Electrification Committee of the Missouri House of Representatives; a resolution signed by the members of the Agriculture Committee of the Missouri State Senate; a resolution by the House of Representatives of the State of Missouri memorializing Congress to appropriate funds necessary to carry out the contracts between G. and T. co-ops financed by the REA and the Southwestern Power Administration; a resolution adopted by the Central Electric Power Cooperative of Jefferson City, Mo.; a resolution adopted by the Boone Electric Cooperative of Columbia, Mo.; a letter from Steve A. Schauwecker, manager of the Three Rivers Electric Cooperative at Linn, Mo., advising that their board of directors endorsed the resolution of the Central Electric Power Cooperative; a letter and resolution adopted by the Callaway Electric Cooperative of Fulton, Mo.; and a resolution adopted by the Consolidated Electric Cooperative of Mexico, Mo.

MISSOURI HOUSE OF REPRESENTATIVES,
86TH GENERAL ASSEMBLY,
Jefferson City, May 2, 1955.

To the Congress of the United States:

We, the undersigned members of the Rural Electrification Committee of the Missouri House of Representatives, do hereby approve the following resolution:

Whereas, low cost electric power rates are most vital to all farm families in Missouri and the Nation, and

Whereas, there exists contracts between the rural electric cooperatives in Missouri and the United States Government, acting through the Southwestern Power Administration, that will provide the means for making available to the rural people of Missouri the lowest electric power rates possible, and

Whereas, the United States Congress can make these contracts operative on a permanent basis without appropriating any funds whatsoever, as these contracts are completely self-sustaining: Now, therefore, be it

Resolved, That the undersigned members of the Rural Electrification Committee of the Missouri State Legislature support activation of the existing contracts between the rural electric cooperatives and the Government; Be it further

Resolved, That copies of this resolution be sent to members of the United States Congress so that the wishes of this committee will be made known.

Chas. N. Foley, Chairman; C. D. Hamilton, Member; Roger E. Kuchner, Member; I. W. Kenson, Member; Wm. R. Sherman, Member; Wesley McMurry, Member; G. H. Cimmcom, Member; Claude E. Duckett, M. D., Member; Frank I. Siebert, Member; Gordon S. Summers, Member; Ralph J. Ayaes, Member; J. H. Kramer, Member; D. M. Overstreet, Member; Ralph Winfield, Member; Lee Aaron Bachler, Member; Shandy Stewart.

MISSOURI SENATE,
Jefferson City, May 2, 1955.

To the Congress of the United States:

We, the undersigned members of the Agriculture Committee of the Missouri State Senate, do hereby approve the following resolution:

Whereas low cost electric power rates are absolutely necessary and essential to the farmers of Missouri, and

Whereas the rural electric cooperatives, with the help and assistance of the Federal Government, have developed plans for the coordinated use of hydroelectric power generated at Government-built dams that will provide the means for making available to the rural people of Missouri the lowest electric power rates possible, without the appropriation of any funds whatsoever, and

Whereas in June 1953 the District Court, Washington, D. C., ruled that the hydroelectric contracts executed in 1950 between the rural electric cooperatives and the United States Government, acting through the Southwestern Power Administration, were legal and binding in every way, and

Whereas on April 28, 1955, the United States court of appeals, when considering the foregoing case, issued the following statement when ordering that "the case be remanded to the district court with directions to dismiss the complaint":

"It is indisputable that the essence of plaintiffs' complaint is the competition which they will suffer if the Government's contracts are carried out. They can

claim no other interest or injury. The defendants have not undertaken to regulate them in any way. They have not been ordered to abandon any of their activities or to forego the expansion programs planned by them. They have not been subjected to any obligation or duty. Their sole interest and objective is to eliminate the competition which they fear. Controlling decisions of the Supreme Court, dealing with other electric power contracts of the Federal Government establish that an interest of this kind is not sufficient to enable them to sue to enjoin execution of the power contracts and program of the Government": Now, therefore be it

Resolved, That the undersigned members of the agriculture committee of the Missouri State Senate wholeheartedly support restoration of the existing contracts between the rural electric cooperatives and the Government; be it further

Resolved, That copies of this resolution be sent to members of the United States Congress.

George A. Spencer, chairman; Wm. M. Quinn, member; Jack C. Jones, member; Leo J. Tozier, member; Noel Cox, member; Charles A. Witte, member; James I. Kelly, member; J. F. Patterson, member; Clayton W. Allen, member; John W. Noble, member.

HOUSE MEMORIAL NO. 2

Memorializing Congress to appropriate funds necessary to carry out the contracts between generating and transmission cooperatives financed by the Rural Electrification Administration and the Southwestern Power Administration and to do all in its power to encourage and further public power in the area served by Southwestern Power Administration.

Whereas it has come to the attention of the House that there is growing pressure in Washington, D. C., seemingly emanating from the Interior Department, to discontinue the use of the Southwestern Power Association, by using economic pressures to force the generating and transmission cooperatives to deal with private utilities instead of the Southwestern Power Administration; and

Whereas the proposed new rate schedule of the Southwestern Power Administration is said to be undermining the very purpose of public power by making it impossible for the generating and transmission cooperatives to negotiate economical contracts for peaking power; and

Whereas the original idea of the Southwestern Power Administration was to make available the maximum quantities of energy to cooperative and other preference customers and ultimately to make power available to the largest possible number of consumers at the lowest rate consistent with good business policy: Now, therefore, be it

Resolved by the House of Representatives of the State of Missouri, That the Congress of the United States be memorialized to appropriate money for the furtherance of the Southwestern Power Administration, and to enact any and all laws consistent with the public power policy of the United States to make power available to all who need and demand it; and be it further

Resolved, That a duly attested copy of this memorial be immediately transmitted by the chief clerk of the house to the Secretary of the Senate of the United States, to the Clerk of the House of Representatives of the United States, to each Member of the Congress from the State of Missouri, and to the chairmen of the Appropriations Committees of both the Senate and the House of Representatives of the United States.

Adopted May 16, 1955.

AUSTIN HILL, *Chief Clerk*.

THREE RIVERS ELECTRIC COOPERATIVE,
Linn, Mo., April 15, 1955.

Hon. THOMAS C. HENNINGS,
United States Senate, Washington, D. C.

DEAR MR. HENNINGS: At the regular board of directors meeting of Three Rivers Electric Cooperative held April 11, 1955, action was taken by the board wholeheartedly approving and endorsing the board action taken by Central Electric Power Cooperative at their annual membership meeting held in Jefferson City, Mo., on March 15, 1955. A resolution setting forth the action by Central Electric Power Cooperative's board is attached to this letter.

I personally would like to kindly ask, in the name of all the rural people in our area, for your support and active participation in formulating the necessary steps required to bring about the desired results set forth in the attached resolution.

If there are any questions in regard to this matter please write.

Very sincerely,

STEVE A. SCHAUWECKER, *Manager.*

A RESOLUTION ADOPTED AND APPROVED AT THE ANNUAL MEMBERSHIP MEETING OF CENTRAL ELECTRIC POWER COOPERATIVE HELD IN JEFFERSON CITY, MO., ON MARCH 15, 1955

Whereas in 1949 Central Electric Power Cooperative, Jefferson City, Mo., executed 40-year "partnership" contracts with the United States Government, acting through the Southwestern Power Administration, providing for (i) the lease and operation of the cooperative's transmission facilities by the Government, (ii) the sale of all thermal power generated by the cooperative from its power plant to the Government, and (iii) the purchase by the cooperative from the Government of all the firm continuous electric power up to a maximum of 70,000 kilowatts, required to serve the rural farm loads of the cooperative; and

Whereas the Southwestern Power Administration, at the time said "partnership" contracts were executed, was authorized by Congress to use out of its revenue from the sale of power those funds necessary to pay for rental of facilities and to purchase thermal power as provided in said "partnership" contracts with the cooperative, such fund was known as a revolving fund and was considered by all parties a permanent businesslike manner in which the Government would fulfill its obligation under the 40-year contracts; and

Whereas the cooperative, by using the aforementioned "partnership" contracts with the Government as a basis for feasibility and security, obtained a loan in the amount of $13,888,000 from the United States Government, acting through the Rural Electrification Administration, to finance the entire construction of the aforementioned transmission facilities and powerplant; and

Whereas in 1951 after construction was well started by the cooperative, the Congress eliminated the revolving fund and in lieu thereof established the continuing fund for the same purpose, but restricted its source to direct appropriation by Congress each year; thus, placing the 40-year "partnership" contracts and obligations on a very unbusinesslike year-to-year appropriation that is subject to the changing policies and attitudes of each new Congress, and prevents economical and proper long-range planning of operation; and

Whereas construction of the cooperative's transmission facilities were completed during 1953 and leased to the Government in accordance with the "partnership" contracts and with complete approval and endorsement of Congress through its action in approving an ample continuing fund for the Southwestern Power Administration to use as working capital with all the Southwestern Power Administration's revenue to be returned to the United States Treasury; and,

Whereas on July 1, 1953, the 4-year-old "partnership" contracts were abrogated by the Department of the Interior, not for lack of congressional approval, as the necessary continuing fund was approved by the 83d Congress in Public Law 172 and, not for lack of authority because the United States district court ruled that funds were available to the Interior Department for use in fulfilling the said "partnership" contracts with the cooperative; and

Whereas since the Department of the Interior refused to carry out the Government's obligation under said integration contracts, thus causing complete disintegration from the Government and leaving costly, extravagant isolated operation, the cooperative sought to negotiate other arrangements with other companies in the area in order to remain solvent and prevent substantial losses in use of facilities and to prevent electric rate increases beyond the ability of the rural people to pay; and

Whereas, after more than 14 sessions of detailed negotiations during a period of 14 months with commercial utility companies in the area, the best arrangement obtainable at the present time would result in a power cost of nearly 10.5 mills per kilowatt-hour which is 3.3 mills higher than the 7.2 mill rate available under existing inoperative "partnership" contracts with the Government; such rate difference would cost the farmers in this area nearly $750,000 more for power next year, and by 1960 the additional cost to the rural people here in central Missouri would be over $1 million each year, which will greatly hinder rural use of electricity and retard rural development; thus, it becomes obvious that the

"partnership" with the Government under the existing integration contracts is the permanent solution for the lowest cost power of any other known method or plan; and

Whereas during congressional hearings concerned with said "partnership" contracts between the Government and the cooperative, only the two following objections have been voiced by Members of Congress: (1) An option in one contract that permits the Government to purchase the transmission lines after 40 years for $10, provided, Congress appropriates the $10, and (2) a provision in one contract that permits the Government to operate the cooperative's transmission lines; and

Whereas the cooperative will duly approve and execute amendments to the "partnership" contracts which will eliminate any provision that will ever permit the Government, (1) to purchase any part of the facilities owned by the cooperative, or, (2) permit the Government to take over the operation of any part or portion of any facilities owned by the cooperative; such amended "partnership" contracts will limit the Government to (i) wheeling of power over the cooperative's lines, (ii) purchase of thermal power that is essential to firm up Government hydropower, and (iii) the sale to the cooperative of continuous firm-power requirements in accordance with the Flood Control Act of 1944; and

Whereas, even though the existing "partnership" contracts are legally in effect, the Department of the Interior has refused to request implementing funds through the Bureau of the Budget, thus attempting to cancel the contracts by preempting the rights of Congress to decide whether or not funds will be available to carry out the Government's obligation: Now, therefore, be it

Resolved, That the president of the Central Electric Power Cooperative be authorized and directed to make a request of the Congress to take whatever action it decides is proper and necessary in order to permit the Southwestern Power Administration to fulfill the Government's obligation under the "partnership" contracts with the Central Electric Power Cooperative for the fiscal year 1956; and be it further

Resolved, That in such request the Congress be asked to establish a permanent, dependable and businesslike method to implement the Government's share of the "partnership" contracts with the Central Electric Power Cooperative, as such permanent authority for the 40-year period is essential for the most economical long-range operations and planning.

BOONE ELECTRIC COOPERATIVE

COLUMBIA, MO.

I, Weaden Hawkins, Secretary of Boone Electric Cooperative, certify that the following is a true and complete copy of a resolution duly adopted by the board of directors of said cooperative at its regular meeting properly held April 13, 1955.

In witness whereof, I set my hand and affix the seal of said Boone Electric Cooperative the 3d day of May 1955.

WEADEN HAWKINS, *Secretary.*

On motion by Weaden Hawkins, seconded by E. S. Wilcoxen, and unanimously adopted, the following resolution was made:

Whereas Boone Electric Cooperative entered into a contract with the Central Electric Power Cooperative, dated January 13, 1950, for the purpose of obtaining adequate low cost power. The Central Electric Power Cooperative entered into a contract with the Southwest Power Administration for the purpose of purchasing hydropower and an exchange of thermal steam power and a lease operating agreement for SPA to operate the system. Under the terms of the abovementioned contract with Central Electric Power Cooperative, the Boone Electric Cooperative would have been able to obtain wholesale power at a cost of 6.05 mills.

Whereas the abrogation of the contract by the Southwest Power Administration with the Central Electric Power Cooperative, and the elimination of the continuing fund, it became necessary for the Central Electric Power Cooperative to operate the system. This resulted in an increase of the wholesale power rate to the member cooperatives, resulting in Boone Electric Cooperative paying 8.6 mills per kilowatt-hour for the power.

Whereas the Central Electric Power Cooperative adopted and approved the attached resolution at the annual membership meeting March 15, 1955; and

Whereas the board of directors of Boone Electric Cooperative are in full accord with the resolution adopted by Central Electric Power Cooperative March 15, 1955; be it

Resolved, to request Congress to take whatever action it decides is proper and necessary in order to permit the Southwest Power Administration to fulfill the Government's obligation under the partnership contract with the Central Electric Power Cooperative.

CALLAWAY ELECTRIC COOPERATIVE, REA,
Fulton, Mo., April 22, 1955.

Re Southwestern Power Administration.

Hon. THOMAS C. HENNINGS, Jr.,
United States Senate,
Senate Office Building, Washington, D. C.

DEAR SENATOR HENNINGS: Attached is a resolution adopted by the board of directors of the Callaway Electric Cooperative, which explains the effect that the present policies of the Department of the Interior, with regard to power in the Southwest, have on the distribution cooperatives in this area.

This resolution also approves and concurs in a request made by Central Electric Power Cooperative of Jefferson City, Mo., that its representative be heard on the 1956 appropriation bill for the Southwestern Power Administration.

We will greatly appreciate whatever support you can give us in bringing about a solution to the power supply problem in this area.

Very truly yours,

JAMES P. MCCLANAHAN, *Manager.*

RESOLUTION

Adopted and approved at the April board meeting of Callaway Electric Cooperative held in Fulton, Mo., on April 19, 1955.

Whereas in 1950 Callaway Electric Cooperative, Fulton, Mo., executed 40 year wholesale power contract with Central Electric Power Cooperative, Jefferson City, Mo., providing for the purchase of all of its power needs from Central Electric Power Cooperative up to a maximum of 2,800 kilowatts, required to serve the rural farm loads of the cooperative; and

Whereas Central Electric Cooperative had entered into 40 year partnership contracts with the United States Government, acting through the Southwestern Power Administration, providing for (I) the lease and operation of Central's transmission facilities by the Government, (II) the sale of all thermal power generated by Central from its powerplant to the Government, and (III) the purchase by Central from the Government all of the firm continuous electric power up to a maximum of 70,000 kilowatts, required to serve the rural farm loads of Central's member cooperatives; and

Whereas the Southwestern Power Administration, at the time the contracts with Central were executed, was authorized by Congress to use out of revenue from the sale of power those funds necessary to pay for rental of facilities and to purchase thermal power as provided in contracts with Central, such fund was known as a revolving fund and was considered by Central's member cooperatives to be a permanent businesslike manner in which the Government would fulfill its obligation under the 40-year contracts; and

Whereas this cooperative, by using the wholesale power contracts with Central Electric Power Cooperative as a basis for feasibility and security, obtained loans from the Rural Electrification Administration to finance construction of additional distribution lines; and

Whereas in 1951 after a loan was obtained and construction started on additional rural distribution lines Congress eliminated the revolving fund and in lieu thereof established the continuing fund for the same purpose, but restricted its source to direct appropriation by Congress each year; and

Whereas on July 1, 1953, the contracts then in operation between Central Electric Power Cooperative and the Government were abrogated by the Department of the Interior; and

Whereas since the Department of the Interior refused to carry out its obligation under said integration contracts with Central Electric Power Cooperative, thus causing complete disintegration from the Government and leaving costly, extravagant, and isolated operation by Central, the cost of which must be borne by the member cooperatives of Central, and which costs are beyond the ability of Central's member cooperatives to pay; and

Whereas Central Electric Power Cooperative sought to negotiate other arrangements with other companies in the area, and after more than 18 months of negotiations with commercial utility companies in the area, the commercial utility companies have shown little interest in arrangements which would permit Central to serve its member cooperatives at a reasonable rate, such as a rate of 7.2 mills per kilowatt-hour which is available under existing inoperative contracts between Central and the Government; and which would cost the rural people in central Missouri $1 million less each year than would be possible under arrangements with the commercial utility companies; and

Whereas Central Electric Power Cooperative will duly approve and execute amendments to its contracts with the Government which will eliminate any provision that will ever permit the Government, (I) to purchase any part of the facilities owned by Central, or (II) permit the Government to take over the operation of any part or portion of any facilities owned by the cooperative, such amended contracts will limit the Government to (I) wheeling of power over Central's lines, (II) purchase of thermal power that is essential to firm up Government hydropower, and (III) the sale to Central its continuous firm power requirements in accordance with the Flood Control Act of 1944; and

Whereas even though existing contracts between Central and the Government are legally in effect, the Department of the Interior has refused to request implementing funds through the Bureau of the Budget for funds to carry out the Government's obligation: Now, therefore, be it

Resolved, That the board of directors of this, the Callaway Electric Cooperative, does confirm and concur in the action of the president of Central Electric Power Cooperative in his request to Congress to take whatever action it decides is proper and necessary to permit the Southwestern Power Administration to fulfill the Government's obligation under the contracts with Central Electric Power Cooperative for the fiscal year 1956, and in addition Congress be requested to establish a permanent, dependable, and business-like method to implement the Government's share of the contracts with Central Electric Power Cooperative so that Central will be permitted to carry out its obligations with its member cooperatives.

[SEAL] M. A. GIBSON, *Secretary.*

A RESOLUTION ADOPTED BY THE BOARD OF DIRECTORS OF THE CONSOLIDATED ELECTRIC COOPERATIVE, MEXICO, MO., AT ITS MONTHLY MEETING ON APRIL 9, 1955

Whereas in 1949 the Central Electric Power Cooperative, with its headquarters office at Jefferson City, Mo., entered into a contract, popularly spoken of and hereinafter referred to as the "SPA contract," with the United States Government, acting through the Southwestern Power Administration, providing for exchange on a sale and purchase basis of thermal power generated by the aforesaid power cooperative for hydroelectric power generated by the Government at its Bull Shoals Dam located in northern Arkansas; and

Whereas said contract was fully carried out and performed thereafter by both parties by and through the aid of the Congress in providing sufficient funds by appropriations annually known as the "continuing fund," for the purchase of thermal power from said cooperative by the Government until on July 1, 1953, the Department of the Interior, without apparent justification, withheld and refused to permit the use of the funds by the Southwestern Power Administration for which appropriation had been made by the Congress at said time, thereby preventing the Government from performing its obligations under the said contract; and

Whereas from and since said July 1, 1953, said power cooperative has been required by the Department of the Interior to enter into a succession of limited period contracts with the Government, termed "interim contracts," in order to procure any hydroelectric energy from said dam and at a substantial increase in cost over and above the cost provided in said SPA contract, by apparent arbitrary and unjustified policy and dictation exercised by said Department of the Interior and notwithstanding it has at all times recognized the continuing validity of said SPA contracts; and

Whereas this, the Consolidated Electric Cooperative, a so-called distribution cooperative, being a member of and receiving all of its electric energy from said power cooperative for distribution to the members of said Consolidated Electric Cooperative, the board of directors of said last-named cooperative, speaking for

themselves and in behalf of all of its many members, are vitally concerned in and desirous of seeing all possible efforts made to revitalize the aforesaid SPA contract by the Congress providing the necessary funds so to do: Therefore, be it

Resolved, That the president of this board of directors be authorized and directed to request the duly constituted Missouri representatives of this district and State, respectively, to take all appropriate action necessary in the effort to prevail upon the Congress to provide adequate funds so as to permit the Southwestern Power Administration to fulfill the Government's obligation under the SPA contract for the fiscal year 1956; and, be it further

Resolved, That in such request the Congress be urged to create a dependable and permanent method of financing and implementing said SPA contract throughout its remaining period so that the Government can carry out its obligations under said contract as such permanent method for the remaining period of said contract is essential for the most economical long-range operations and planning.

SOUTHWESTERN GAS AND ELECTRIC CO., TEXARKANA, TEX.

STATEMENT OF RICHARD L. ARNOLD, GENERAL COUNSEL

GENERAL STATEMENT

Chairman HAYDEN. The first witness that I have listed here is Frank Wilkes. We will be glad to hear from him or others associated with him for 30 minutes. Mr. Wilkes.

Mr. ARNOLD. My name is Richard L. Arnold. Mr. Chairman, Mr. Wilkes cannot be here. I am a lawyer by profession, and I live in Texarkana, Ark. I have here a group who are representing various companies operating in the southwestern area of the United States. I appear here on behalf of the appellant companies who were plaintiffs in the recently decided litigation of *Kansas City Power & Light Company, et al.*, v. *McKay, et al.* That litigation has been, I think, the subject of rather extensive testimony before the House committee, and I hope that this committee would be interested in hearing from us in that regard.

I will say that I represent not only the appellant companies in that litigation, but I also represent and speak for the following companies: Oklahoma Gas & Electric Co., Southwestern Gas & Electric Co., Central Louisiana Electric Co., Louisiana Power & Light Co., and Gulf States Utilities Co.

Before I make my oral presentation, Mr. Chairman, may I say we will have only two speakers. First I will lead off, and then Mr. Warren L. Porter, who is vice president of Kansas City Power & Light Co., will make an oral presentation. Other gentlemen are here, and I will say that they would like to stand up and be noted as being present, and also to file statements.

Chairman HAYDEN. That will be done.

Mr. ARNOLD. Those statements concern mainly the present status of the negotiations between the G. & T. cooperatives in Oklahoma and Missouri, and the companies. Therefore, I would like to call on Mr. Herbert L. Branan, who is in the room, who would like to file a statement.

OKLAHOMA GAS & ELECTRIC CO.

STATEMENT OF HERBERT L. BRANAN, REPRESENTATIVE

PREPARED STATEMENT OF W. B. GESELL

Mr. BRANAN. My name is Herbert Branan, Oklahoma Gas & Electric Co., and I have with me Mr. Ross Harlan. I am filing a statement on behalf of W. B. Gesell, vice president in charge of opera-

tions of Oklahoma Gas & Electric Co. They relate to the negotiations between this company and Western Farmers Electric Cooperative on the integration contract.

Chairman HAYDEN. The statement will be included in the record.

(The statement referred to follows:)

STATEMENT OF W. B. GESELL, VICE PRESIDENT IN CHARGE OF OPERATIONS OF OKLAHOMA GAS & ELECTRIC CO., OKLAHOMA CITY, OKLA.

I am W. B. Gesell, vice president in charge of operations of Oklahoma Gas & Electric Co., which has its principal office at Oklahoma City, Okla. This statement on behalf of my company is a brief history of the negotiations between Western Farmers Electric Cooperative and Oklahoma Gas & Electric Co. and Public Service Co. of Oklahoma.

The completion of the steam-electric station of the Western Farmers Electric Cooperative, together with the completion of a large portion of its transmission system, brought into the foreground the need for some integration of the power generating and transmission facilities of the cooperative with the systems of the companies operating in the area, which are the Oklahoma Gas & Electric Co. and the Public Service Co. of Oklahoma. Early in 1953 and prior to the period of operation of the cooperative, several meetings between representatives of the companies and the cooperative had taken place and the possibilities of some arrangements for mutual cooperation had been explored. There seemed to be a lack of interest on the part of the cooperative's management in any arrangements except those of a temporary or short-time nature.

In order to give a clearer understanding of the principles involved in these negotiations we are listing below some of the salient facts pertinent to this matter.

Serious negotiations stemmed from area meetings at Springfield, Mo., on October 1 and October 9, 1953, between representatives of the generating and transmission cooperatives in Missouri and Oklahoma and the electric companies in the same area. The possibility of integration contracts between the G. & T. cooperatives and the electric companies was confirmed, and general principles discussed which could form the basis for such contracts. It was concluded that the best progress toward integration contracts could be made by the individual G. & T.'s dealing directly with the companies that were operating in the same general area.

On November 20, Mr. R. K. Lane, president of the Public Service Co., received a letter from Mr. H. G. Templeton, president of the cooperative, containing a statement of principles on which the cooperative management was willing to begin negotiation with the companies. The companies replied that each of them was willing to enter into negotiations and a conference was held on December 18, 1953, in Tulsa, Okla. At this meeting there was considerable discussion of the statement of principles from Mr. Templeton's letter. Substantial progress was made at that time in establishing the basic factors involved in the integration negotiations.

As requested by the cooperative, the Oklahoma Gas & Electric Co. developed a draft of contract which it believed was drawn in accordance with the principles previously discussed between the parties at the meeting in Tulsa and in subsequent letters. Two copies of this contract draft were transmitted to Mr. Templeton on February 10, 1954.

On February 22 the Oklahoma Gas & Electric Co. again wrote the cooperative expressing hope that the negotiations could be carried forward soon and it was stated at this time that the companies would be willing to consider negotiations on the basis of any other contract draft which the cooperative wished to submit.

On April 6 a meeting of the companies and cooperative was held in Oklahoma City, at which time there was discussion of a contract draft submitted by the cooperative on March 25 for negotiation purposes. It was thought that substantial progress toward agreement was made by the parties. It was decided that certain information would be exchanged and, at the request of the cooperative, the companies agreed to prepare a revised draft for further negotiation.

During April 1954 various information was exchanged between the companies and the cooperative concerning load forecasts and points of proposed interconnections. The meeting on May 4, which had been agreed to at the April 6 meeting, was postponed by the cooperative on April 27. Approximately 2 months after the scheduled meeting of May 4, the cooperative on June 29 called another meeting in Oklahoma City for July 15 in order to continue negotiations.

At the meeting on July 15, 1954, in Oklahoma City, further progress was made in reaching agreement on certain important issues in the proposed draft. The rates for purchase and sale of power were discussed at this time and the general principles of the division of investment necessary to make the proposed interconnections were discussed and agreed upon.

During this meeting the cooperative raised the question concerning the hydroelectric power and some discussion was held on the extent to which the availability of this hydroelectric power would affect the proposed agreement. The companies reiterated their position that they felt a fair and equitable contract could be negotiated without any hydroelectric power being included in the arrangements. It was pointed out that there was no assurance of the availability of any such power and no assurance of price.

The companies expressed a desire to move ahead on the negotiations and since the cooperative insisted as it had in the past that there would be no integration contract without the hydroelectric power being in the arrangements, the companies agreed to continue discussions on that matter.

During August and September work progressed on the drafting of the proposed contract embodying suggestions of the July 15 meeting. It was planned that such a contract draft would have been available for further negotiations in late September or early October. However, certain events intervened.

On September 28 and 29, 1954, meetings were held in Kansas City of the companies and the G. and T. cooperatives in Missouri and Oklahoma, and a joint meeting of these parties, along with representatives of the Department of the Interior, Rural Electrification Administration, and Southwestern Power Administration. At this time the proposed hydroelectric contracts for Missouri (a part of the integration negotiations) were discussed and certain amendments agreed upon. The outcome of the contract negotiations in Missouri is an important factor in the Oklahoma negotiations and could provide one of the keys to the reaching of agreement in Oklahoma. Due to these meetings in Kansas City and the necessity for appraising the various factors discussed, it was decided that the next meeting for negotiation purposes should wait until the hydroelectric contract matter was further resolved.

On October 25 by telephone call and on October 26 by letter, the cooperative was notified of the illness of Mr. Gesell of the Oklahoma Gas & Electric Co. The cooperative was informed that a meeting would be arranged as soon as Mr. Gesell returned to his office. The cooperative's attitude, as stated at that time, was that there was no need for meetings in the immediate future as there was not much to negotiate at the present time.

On December 7, 1954, the cooperative wrote requesting a separate proposal from the Oklahoma Gas & Electric Co. (not an integration proposal) for direct sale of power to the cooperative at Anadarko from 1956 through 1960. Also, requested was a specific proposal with respect to the sale by the company of a small amount of power to the cooperative at Woodward, Okla., for a period of 4 months beginning in June of 1955. The company replied by letter on December 8 that the companies would like to arrange a conference with the representatives of the cooperative to discuss the proposals of the cooperative and stating also that the companies were then working on the completion of a new draft of the proposed integration contract.

A conference between the parties was scheduled for December 23 and was later canceled by the cooperative. A revised contract draft (P–3) including rates for negotiation, was submitted to the cooperative by the companies on December 31, 1954. A meeting was subsequently held on January 25, 1955, in Oklahoma City to discuss this draft. At this meeting some minor changes in wording were suggested and agreed to and the major portion of the negotiations was consumed in discussing the rates for purchase and sale of power and energy. It was agreed that further study would be given to this matter of rates. It was decided that a later meeting would be held, the time to be decided subsequently, at which time the matter of revised rates would be considered by the parties.

On January 28 Mr. Gesell proposed a meeting for February 11 to pursue the discussions of the rates for power and energy and use of facilities in the proposed agreement. In this letter it was suggested that during the interim period the parties would have time to reexamine the economics of the proposed agreement. On February 3 the cooperative wrote stating that its representatives would be unable to attend a meeting on February 11 and suggesting no alternate date. However, Mr. E. E. Karns, general manager of the cooperative, stated in this letter that he would like to arrange for a meeting with Mr. Gesell on February 7 (1) to review cost estimates of the proposed cooperative transmission line from

Alva to Woodward, including the division of costs of such line and the matter of payment for the use of such line "during the life of any possible contract" (2) to determine the arrangements under which the Oklahoma Gas & Electric Co. would agree to sell power to the cooperative at Woodward, Okla., for a period of 6 to 8 months, beginning about June 1, 1955. This letter seemed to indicate that the cooperative desired to arrange short-term agreements with the company and did not wish to accelerate the negotiations on the integration contract. This is evidenced from this statement in the letter from the cooperative: "It is becoming increasingly obvious to us that decisions will have to be made on the foregoing matters prior to any possible conclusion of satisfactory contracts between the companies and western farmers."

At the meeting on February 7 and at a subsequent meeting on March 1, the Oklahoma Gas & Electric Co., in order to help alleviate the temporary shortage on the cooperative's system in its Woodward area and in response to the urgent request of the cooperative, agreed to supply the cooperative's temporary deficiency in that area and in return would take only the same amount of power from the cooperative at Anadarko (where, the cooperative stated, it expects to have surplus power available during the summer of 1955). This offer for helping western farmers was made solely on the basis of a tradeout of power and energy and involved no element of profit for the company. This proposal which was urgently requested by the cooperative was submitted by the company in contract form on March 10, 1955, and has not yet been acknowledged.

At the meeting on February 7, 1955, and on two other occasions during February and March Mr. Gesell suggested a further meeting to discuss the integration contract, but Mr. Karns did not agree to consider a date.

A letter dated March 29 was received by the companies from the cooperative indicating that the cooperative after the several weeks' delay was again ready to consider the integration proposal.

In reply the companies proposed that a meeting be held on April 12, in order to move ahead once again on the negotiations. The cooperative did not agree to this, stating that it desired to have certain information from the companies in advance of any meeting.

On April 13 the companies, in a further effort to advance the negotiations, submitted a draft of contract (B–4) to the cooperative and emphasized that this was intended as a draft for further conference and negotiation with the cooperative. It was suggested then that the companies would be glad to have a revised draft submitted by the cooperative if the cooperative had any suggested changes or criticism. A request was made to the cooperative for an early conference on the B–4 draft.

Repeatedly in the negotiations the companies have insisted that they are always willing to accept for study and discussion any proposals which the cooperative wished to make concerning any contract draft, or to consider any complete contract draft which the cooperative might wish to submit.

By letter of May 4, 1955, from the cooperative the companies were advised, "It seems useless to conduct negotiations if this proposal is the best the companies intend to make." The cooperative did not submit any revisions of the contract draft as the company had suggested in its letter of April 13.

By letter dated May 10 the Oklahoma Gas & Electric Co. again requested the cooperative to agree to a conference date so that the companies could be advised of the extent to which the latest contract draft (B–4) fell short of the expectations of the cooperative and be advised as to how the proposal could be improved. No reply has been received at this time. The Public Service Co. of Oklahoma on May 9, in reply to the cooperative's letter of May 4, requested the cooperative to submit a proposal which the cooperative felt was equitable and satisfactory.

Subsequent correspondence from the cooperative on June 1 offered no proposals or counterproposals by the cooperative as requested by the companies, and indicated no progress toward a conference.

We recognize that contract negotiations of this type are necessarily long and involved. The companies have been, and still are, willing to sit with and negotiate with the cooperative, since it is our belief that many of the purported differences of opinion can be resolved by the parties meeting and discussing them. The companies stand ready at this time, as stated in our letter of May 10, to resume the negotiations as soon as the cooperative is ready, looking toward the successful conclusion of a contract which is both fair and equitable, and which will enable the cooperative to continue to render adequate electric service to all its customers.

THE EMPIRE DISTRICT ELECTRIC CO. AND MISSOURI PUBLIC SERVICE CO.

STATEMENT OF RICHARD K. McPHERSON, REPRESENTATIVE

PREPARED STATEMENT

Mr. ARNOLD. I will ask Mr. Richard K. McPherson, who is general counsel of the Empire District Electric Co., to stand.

Mr. MCPHERSON. I am Richard K. McPherson. I would like to file and include in the record, with your permission, a statement on behalf of the Empire District Electric Co., and Missouri Public Service Co.

With me is Mr. F. H. Shelton, vice president of the Empire District Electric Co., and Mr. M. C. Boogher, vice president of Missouri Public Service Co.

Chairman HAYDEN. The statement will be filed, and included in the record.

(The statement referred to follows:)

STATEMENT BY THE EMPIRE DISTRICT ELECTRIC CO. AND MISSOURI PUBLIC SERVICE CO.

This statement is submitted on behalf of the Empire District Electric Co. of Joplin, Mo., and Missouri Public Service Co. of Warrensburg, Mo., hereinafter referred to as the companies.

The purpose of this statement is to inform the committee of the negotiations between the companies and the KAMO Electric Cooperative, Inc., with respect to a contractural arrangement by which the respective facilities of the cooperative and the companies would be integrated, and which would carry out the expressed desire of the Congress that such an arrangement be made that "will not require the continued use of the continuing fund."

Officials of KAMO and the companies have been in practically continuous negotiation since October 1953, endeavoring to work out a satisfactory basis of integration, utilizing to the best advantage the peaking hydropower of the Federal Government produced at the multiple-purpose projects in the Southwest. During that time, exhaustive engineering and economic studies have been made, and legal contract procedures explored; and as a result of a series of proposals and counterproposals, the companies submitted to KAMO on April 21, 1955, an "Outline of Proposed Contractual Arrangements for Integration," which the companies believe to be acceptable to the majority of the negotiating committee of KAMO. A draft of a definitive contract embodying the proposal has been prepared by KAMO and the companies, and the proposal of the companies is under consideration by KAMO. Negotiations are underway by KAMO with the Southwestern Power Administration and the Department of the Interior, in regard to a contract between KAMO and SPA concerning the amount of hydro peaking power to be available, and also the use of certain SPA facilities in Missouri. During a 3-day conference in Washington on June 6, 7, and 8, 1955, agreement was reached between the Department of the Interior, SPA, KAMO and the companies on the broad principles of the contract, with certain of the details to be agreed upon at later conferences. A meeting on this contract was held in the Tulsa office of SPA 3 days ago.

The quantity of Government hydro peaking power being considered for commitment to KAMO under the proposed contract is only an amount from the present hydroprojects necessary to meet KAMO's requirements in the immediate future, with a reservation in future projects to meet KAMO's load growth during the next 10 years. The rights of other preference customers to Government hydropower are not being encroached upon.

In the negotiations for the use of transmission facilities, it was recognized that a capacity reservation in the NW Electric Power Cooperative's 161,000-volt transmission line (see map, exhibit II) from Bull Shoals to Springfield and Clinton for the use of KAMO must be made, and also a reservation of capacity to deliver Government hydropower to Springfield and Lamar, Mo.

The companies believe that their proposal carries out the following instructions of the Congress:

"It is the desire of the committee that the Secretary (of Interior), representatives of the cooperatives, and representatives of the power companies in the area immediately give consideration to making such arrangements that will not require the continued use of the continuing fund." [1]

The attached letter of transmittal, marked "exhibit I," which accompanied the proposal to KAMO, adequately sums up the reasons why the companies' proposed plan is the best method for the member cooperatives of KAMO to obtain an adequate, economical, and dependable power supply for the future, and that it will make unnecessary the use of the continuing fund or annual appropriations of money by the Government.

Based upon estimates of KAMO of its power requirements for the next 10 years, the member cooperatives of KAMO would receive under the terms of the companies' proposal an adequate, dependable, round-the-clock power supply at a net average cost of between 7.75 mills and 8.33 mills per kilowatt-hour. These estimates are based on new rates for hydro peaking power filed by the SPA with the Federal Power Commission. Copies of the proposal to KAMO are available to the committee.

The proposal represents the result of more than 18 months of joint effort on the part of KAMO and the companies. As stated in the companies' letter transmitting it:

"This proposal of the two companies will assure the distributing member cooperatives of KAMO a power supply for all their future needs at a reasonable rate. The rate will be much lower than would result from independent operation of the systems, will allow the cooperatives to repay their loans to the Government, will be comparable to power costs obtainable on a sound business basis from any other source, and will allow the ultimate rural consumer to fully utilize electric service. This arrangement will allow the cooperatives and the companies to work together in the development of their common area, to the benefit of the users of the service of each, thereby preserving to the members of the cooperatives the ownership of their facilities, and to the investors in the electric companies the ownership of their properties."

The proposal put into effect by contract makes unnecessary any appropriation to reactivate KAMO-SPA contracts or the expenditure otherwise of a single dollar by the United States.

For the information of the committee, the Empire District Electric Co. (Empire) serves all or a portion of 23 counties in the area where the States of Missouri, Kansas, Oklahoma, and Arkansas converge. Missouri Public Service Co. (MPS) is located in west south central Missouri. The southern boundary of its territory adjoins that of Empire. In such portion of its territory, MPS serves all or a part of 16 counties. KAMO Electric Cooperative, Inc., is a transmission cooperative owning 630 miles of 69,000-volt transmission lines and related substation facilities in southwestern Missouri, in the territory served by the companies. The attached map, exhibit II, shows the principal transmission facilities of the companies and KAMO, as well as a 161,000-volt transmission line of NW. Electric Cooperative, a portion of the 161,000-volt transmission line of Central Electric Cooperative, and the transmission facilities of the Southwestern Power Administration in southwest Missouri.

EXHIBIT I

THE EMPIRE DISTRICT ELECTRIC CO.,
April 21, 1955.

KAMO ELECTRIC COOPERATIVE, INC.,
Vinita, Okla.

(Attention: Mr. Rex Dewey, General Manager.)

GENTLEMEN: On behalf of the Missouri Public Service Co., and the Empire District Electric Co., we are submitting to you for your consideration a proposal in memorandum form, for the integration of the transmission lines of KAMO Electric Cooperative, Inc., with the facilities of the two companies, utilizing the hydropower available to KAMO from the Southwestern Power Administration.

In applying the terms of this proposal to KAMO's estimates of its requirements for the next 10 years, the result will be 4.13 mills per kilowatt-hour at the secondary side of KAMO's substations, exclusive of KAMO's portion of the transmission expense.

While KAMO's 10-year estimates are based upon approximately 47 percent annual load factor, we are informed that the present experience is nearly 54 per-

[1] Page 4, S. Rept. 445, 83d Cong., 1st sess.

cent load factor. In this case, the estimated power cost would be 3.55 mills per kilowatt-hour.

Based on an estimate of 4.2 mills per kilowatt-hour for KAMO's average transmission expense for the same period, the total cost of power would be 8.33 mills per kilowatt-hour at 47 percent load factor, or 7.75 mills per kilowatt-hour at 54 percent load factor. The details of the application of this proposal to KAMO's 10-year estimates are inclosed as exhibit B. This estimate of 4.2 mills per kilowatt-hour is based partly upon information furnished to us by KAMO. Since we are not familiar with certain items of administrative costs and other expenses that would be experienced under REA cooperative operation, we are not able to assume responsibility for this estimate of transmission expense. We are of the opinion, however, that 4.2 mills is higher than will be experineced during the period.

The plan, as proposed, involves the purchase by KAMO of peaking hydropower from Southwestern Power Administration, and the selling of this peaking power to the companies. The facilities of KAMO and certain SPA transmission facilities will be interconnected or integrated with the facilities of the companies. The companies will supply the necessary kilowatt-hours from their steam plants to provide round-the-clock (firm) service at KAMO's substations, for the benefit of the distributing member cooperatives. The companies also will have the use of the excess capacity in KAMO's transmission lines, and the use of certain SPA facilities, and will compensate KAMO for same in an amount of $250,000 per year, and will operate and maintain a portion of the SPA facilities. The proposal provides that the determination as to which party shall operate and maintain KAMO's system is subject to the wishes of KAMO.

This proposal of the two companies will assure the distributing member cooperatives of KAMO a power supply for all their future needs at a reasonable rate. The rate will be much lower than would result from independent operation of the systems, will allow the cooperatives to repay their loans to the Government, will be comparable to power costs obtainable on a sound business basis from any other source, and will allow the ultimate rural consumer to fully utilize electric service. This arrangement will allow the cooperatives and the companies to work together in the development of their common area, to the benefit of the users of the service of each, thereby preserving to the members of the cooperatives the ownership of their facilities, and to the investors in the electric companies the ownership of their properties.

As you know, your negotiating committee and representatives of the companies have been working almost continuously, in exploring all phases of this situation, since October 1, 1953. We believe that, through this series of meetings and studies, and the several proposals by the companies and counterproposals by KAMO, the various viewpoints on the many problems involved have been reconciled. We believe, therefore, that you are in a position to advise us within a reasonable time of your agreement to this proposed plan.

We realize that, before the definitive contracts can be prepared and the final terms agreed upon, it is necessary for KAMO to negotiate with the Southwestern Power Administration for its allotment of hydropower, and for the use of certain transmission line and substation facilities of SPA. We urge, therefore, that you advise us as quickly as possible as to your agreement to this proposal, and initiate immediately the necessary negotiations with SPA. The two companies stand ready to join with you and to assist in these negotiations.

We wish to thank you and the members of your committee for the courtesies extended, and the conscientious and diligent effort given to obtain a satisfactory conclusion of this matter.

Yours very truly,

THE EMPIRE DISTRICT ELECTRIC CO.,
By D. C. MCKEE, *President*,
MISSOURI PUBLIC SERVICE CO.,
By M. C. BOOGHER, *Vice President*.

MISSOURI POWER & LIGHT CO. AND UNION ELECTRIC COMPANY OF MISSOURI

STATEMENT OF J. D. JAMES, CHAIRMAN OF THE BOARD OF MISSOURI POWER & LIGHT CO.

PREPARED STATEMENT

Mr. ARNOLD. With your permission, I will call Mr. J. D. James, chairman of the board of the Missouri Power & Light Co.

Mr. JAMES. Mr. Chairman, I am J. D. James, chairman of the board of Missouri Power & Light Co. I desire to file a statement in behalf of my company, and the Union Electric Company of Missouri, the parent company of Missouri Power & Light Co.

With me this morning is Mr. E. R. Kropp, vice president of the Union Electric Co., Mr. Charles Dougherty attorney, and Mr. Harold Gove.

(The statement referred to follows:)

STATEMENT OF J. D. JAMES, CHAIRMAN OF THE BOARD OF MISSOURI POWER & LIGHT CO., JEFFERSON CITY, MO., AT HEARING ON H. R. 6766, INTERIOR DEPARTMENT APPROPRIATIONS, 1956

I am J. D. James, chairman of the board of Missouri Power & Light Co. which has its principal office in Jefferson City, Mo. I make this statement on behalf of Missouri Power & Light Co. as well as on behalf of its parent company, Union Electric Company of Missouri, which has its principal office in St. Louis, Mo.

CORRECTING THE RECORD

At the outset I would like to correct certain erroneous statements contained in the Report of the House Appropriations Committee on this bill (H. Rept. No. 747 filed June 10, 1955) and certain misstatements made before the central panel of the Public Works Subcommittee of the House Appropriations Committee.

First, may I say that I am a lawyer by profession, and I wish to make it absolutely clear that, contrary to the statement of the House committee at page 5 of its report, the inactivated lease-option contracts between the Southwestern Power Administration (SPA) and the super co-ops have not been adjudged to be valid and legal by the court action in the case of *Kansas City Power & Light Co. et al.* v. *McKay et al.* It is true that the United States district court held that the plaintiff companies had a standing to sue and then held that the contracts were legal. However, the companies appealed this decision to the United States Court of Appeals for the District of Columbia, which latter court held that the plaintiff companies did not have a standing to sue and, on the basis of such holding, ordered that the aforesaid decision of the district court be vacated. Thus the Court of Appeals did not even consider the merits and by its order of vacation made sure that there was no judgment on the merits left on the books. Therefore, the statement that the lease-option contracts have been held legal and valid by the courts is utterly and completely untrue as any competent lawyer can assure you. The plaintiff companies, however, firmly believe that they do possess a standing to sue in this case and that the subject contracts are invalid and illegal under the Flood Control Act of 1944 and the Rural Electrification Act of 1936. Consequently, the companies have notified the court of appeals that they will as soon as possible and within the allotted time therefor, petition the United States Supreme Court for a writ of certiorari to review and hear this case. The issues, therefore, and particularly the legality of the subject contracts are still in litigation and have not yet been decided.

Secondly, the House hearings contain testimony by the committee chairman, the Honorable Clarence Cannon of Missouri, and by Mr. Truman Green, manager of Central Electric Power Cooperative (Central) in which it is represented that under the integration with Union Electric Co. of Missouri and Missouri Power & Light Co. (the companies) as proposed in negotiations (hereinafter more fully discussed) between Central and the companies, the cost of electric service to Central would be about 10.2 mills per kilowatt-hour. The truth is that in the course of negotiations between Central and the companies, the companies sub-

mitted to Central a cost analysis (which analysis apparently is the basis on which Central computes its 10.2 figure) which showed that the companies could supply power to Central at a rate of approximately 6 mills per kilowatt-hour for delivery at 69 kilovolts at Central's Chamois plant near Jefferson City, Mo., and at 161 kilovolts at its Mansfield and Maries substations in Missouri. The 10.2-mill rate discussed in the testimony is undoubtedly the price at which Central would deliver power and energy to its member distribution cooperatives and is not the rate at which Central would pay the companies. The only conclusion that can be drawn, therefore, is that Central assigns a cost of more than 4 mills per kilowatt-hour for transmission of the power and energy from Chamois, Mansfield and Maries to the load centers of its member distribution cooperatives.

Moreover, the testimony of Representative Cannon and Mr. Green points up the fact that reactivation of the inoperative lease-option-contracts at either present or proposed SPA rate levels would result in an outright and substantial subsidy to Central. For example, these gentlemen have compared this Central-computed rate of 10.2 mills with an SPA rate to its direct customers of 7.16 mills per kilowatt-hour for the purpose of showing that the companies' proposal to Central is unacceptable. Such a comparison can only be misleading, for Assistant Secretary of the Interior Aandahl on several occasions has clearly stated that the SPA rate of 7.16 mills per kilowatt-hour does not include any of the costs of transmission by SPA over Central's lines. In fact, on March 2, 1955, Mr. Aandahl testified before the House Subcommittee on Public Works Appropriations that the SPA rate would have to be further increased to 8 or 9 mills per kilowatt-hour if SPA were to assume operations under the old lease-option contracts. Moreover, Mr. Truman Green, testifying before the same subcommittee on February 21, 1955, stated that Central's cost of transmitting power and energy from Bull Shoals to the load centers of Central's member distribution cooperatives would cost "5 to 6 mills per kilowatt-hour more so that when we get up here to our members we are talking about 11- or 12-mill power per kilowatt-hour."

Since the inoperative lease-option contracts provided that SPA should deliver power and energy to the load centers of Central's member cooperatives, it is clear that even if the power were supplied to Central at Bull Shoals absolutely free, it would still cost Central (or the Government) as much as the present rate A—5.5 mills—to deliver the power to the load centers of its member cooperatives. And, under the new rate A—7.16 mills—now filed with the Federal Power Commission for approval, there would be only a mill or two remaining to SPA after absorbing the transmission costs. Obviously, the sale of power and energy for 1 or 2 mills would recover only a small fraction of the cost of generation.

It is clear therefore, that in view of Secretary Aandahl's testimony and in view of Mr. Truman Green's testimony, Central cannot receive power at the load centers of its member distribution co-ops at SPA's current or proposed rates without an outright and sizable subsidy.

It should be noted also that the continuing fund through which the House proposes to furnish this Federal subsidy is nothing more than a bookkeeping device which gives the Southwestern Power Administration a check on the United States Treasury, permitting an expenditure of Treasury funds without congressional appropriation. If the Senate does not correct this House action of surrendering control over the United States Treasury, Congress will be certifying a check for the purpose of implementing the lease-option contracts, the legality of which is extremely doubtful and is presently in the courts for determination.

NEGOTIATIONS WITH CENTRAL

I would now like to report to the Senate on the status of the negotiations which have been carried on between Central and the companies. Since their inception I have been a party to these negotiations on behalf of the companies and Mr. Truman Green has conducted the negotiations on behalf of Central. As background, I remind this subcommittee that Central has an investment of approximately $14 million in generating and transmission facilities consisting of—

(1) A 15,000-kilowatt (single unit) steam plant at Chamois, Mo. (approximately 25 miles east of Jefferson City, Mo.);

(2) A 161-kilovolt transmission line extending 183 miles from the Chamois plant to Bull Shoals Dam in Arkansas, together with three 161/69 kilovolts substations; and

(3) 328 miles of 69-kilovolt transmission lines radiating from the Chamois plant to the load centers of Central's member distribution cooperatives, together with 20 related substations.

Central's steam plant has a rated capacity of 15,000 kilowatts and the Bull Shoals-Chamois transmission line has a capacity of approximately 100,000 kilowatts. The current maximum load of Central served from these facilities is about 40,000 kilowatts. It is clear therefore that Central's transmission facilities are greatly in excess of its present needs. That such excess capacity is a financial burden on Central's members is clearly illustrated by the fact that the interest and amortization payments alone which Central must make on the $14 million of funds advanced to Central by REA are so large—in relation to Central's load—that Central, with its present load and operating independently, would, in order to meet such payments, be obliged to collect from its members rates per kilowatt-hour which would be higher than the rates at which the cooperatives in the area can purchase power from the companies. Briefly, therefore, the investment in Central's facilities is far greater than Central can support at reasonable rates with its present or prospective levels of load.

The Congress has decided that the solution to this economic problem of Central was not to be found in Federal appropriations and in the use of Federal moneys. In 1952 the Congress expressed the hope that the problems in the Southwest area would be resolved by contracts with the companies. Moreover, the Interior Department has recognized that the now-inactivated contracts between SPA and the generating and transmission cooperatives were uneconomical to SPA and the Federal Government.

In accordance with the clear and express admonition of the Congress in 1953, the companies, which theretofore had been negotiating with SPA, on October 1, 1953, opened negotiations with Central. Throughout these negotiations to date, the companies have taken a realistic approach. The companies expect and anticipate no economic gain from these transactions but at the same time the companies should not enter into an arrangement that is uneconomic to the extent that others of the companies' customers must subsidize Central and its members. The companies, being under strict regulation by regulatory authorities, can only enter into an agreement which is economically feasible. That is to say, the companies do not seek profit but they must avoid loss in the transaction. Within these limits, we are sure that there is a solution to the problem that is fair and equitable both to Central and the companies.

Reducing the problem to its simplest terms, Central has an excess transmission capacity that is economically burdensome to it. The companies can pay Central for the excess capacity in its 161-kilovolt transmission line provided they have something to transmit over that line. If Central can acquire more hydroelectric power and energy from SPA than it actually needs and sell such additional power and energy to the companies, then the excess capacity in the line can be put to good use. Moreover, if the hydroelectric power and energy is made available to the companies, the companies will use it and pay for it as peaking power, thus attributing to it its highest value.

With this understanding of the economics involved, the companies have been negotiating with Central on an agreemen tunder which:

(1) The generating and transmission resources of the companies and Central would be integrated for operational purposes, but the absolute ownership, and in general the operation, of such facilities would be retained by the party who now owns the particular facility;

(2) Central would purchase the hydroelectric power and energy from SPA at the 161-kilovolt bus at the Bull Shoals Dam;

(3) Central would sell to the companies all of the power and energy which it purchases at Bull Shoals and which it generates at its Chamois generating plant, such power and energy to be scheduled by the companies.

(4) The total power and energy requirements of Central and its members would be satisfied from the total power and energy resources of the integrated systems.

The objective of such an agreement is to enable Central to meet its operating and maintenance expenses and debt service on the Chamois plant and on the 161-kilovolt transmission line. The economic feasibility of such a plan, however, depends on hydroelectric power and energy being available to the companies at Bull Shoals in sufficient amounts to justify such undertaking by the companies and at the same time provide a reasonable cost of power to Central.

Among the advantages to be realized from such a plan of integration are the following:

(1) Realization of the maximum benefit of the hydropower purchased from SPA by using it as peaking power for the entire integrated system;

(2) Assurance of a firm power supply to Central and its members at a price which would reflect the value to the companies of (*a*) the hydropower

made available for peaking purposes, and (*b*) the use of Central's facilities made available through the integration;

(3) Availability to Central of lowest cost power and energy through the integration and scheduling of Central's single unit 15,000 kilowatts Chamois steam plant with the larger and more efficient plants of the companies' system;

(4) Utilization by the companies of surplus capacity in Central's 161-kilovolt transmission line would further lighten Central's financial burden by providing a return on capacity which would otherwise be of no utility at this time nor for many years in the future; and

(5) Dependability of Central's power supply would be greatly increased by the interconnection of its system (which by itself is dependent on a single 161-kilovolt line 183 miles long and a single unit steam plant of 15,000 kilowatts) with the system of the companies, which includes 1,500,000 kilowatts of generating capacity and extensive transmission facilities.

APPRAISAL

For over a year and a half now the companies have been negotiating with Central in seeking to evolve a solution to this problem. The companies have always felt, and still feel that a solution which is fair, equitable, and honorable to all is possible. After such a prolonged period of negotiation, however, the companies must now reluctantly report to this subcommittee that an agreement between Central and the companies is not imminent, and, in fact, will probably not be consummated until Central clearly recognizes that such an agreement must have a sound economic basis. The companies have worked diligently to present an agreement which Central will accept. We have made offers, and have made such engineering and economic studies as we or Central have deemed necessary or appropriate. We have furnished all figures and computations that Central has requested. Each time, however, Central has found the proposal unacceptable. It was only very recently when we learned of Central's interpretation of the congressional admonition to contract that we fully understood Central's repeated negative answers to our proposals. This interpretation by Central was to the effect that if contracts "equally satisfactory to the cooperatives" could be negotiated with the companies, it would be unnecessary to reactivate the Central-SPA contracts.

If by contracts "equally satisfactory to the cooperatives" is meant the rate provisions as originally contained in the Central-SPA contracts, an agreement between Central and the companies is impossible. Such a position by Central, however, is not realistic, for such rate is below cost and in fact not even now available from SPA because section 5 of the Flood Control Act of 1944, under which SPA operates, requires that rate schedules shall be drawn so as to pay the costs of production and transmission over Interior's lines as well as to retire the capital investment allocated to power over a reasonable period of years. Indeed, the audit report to the Congress by the Comptroller General of the United States for the fiscal 1954 makes the following statement with regard to SPA:

"For fiscal year 1953 the net revenues reported by the (Southwestern Power) Administration were not adequate to cover the costs of producing electric energy and to amortize the Government's investment in power facilities for the projects in operation for the entire year. The following tabulation shows the same to be true for projects in operation for the entire fiscal year 1954."

The Department of the Interior has recognized that its "rate A" (which is the rate called for in the SPA-Central contract) was so low as not to comply with the statutory requirements of section 5 of the Flood Control Act of 1944 and has filed with the Federal Power Commission for approval an increase in "rate A" from about 5.5 mills to about 7.16 mills per kilowatt-hour for customers having a 50-percent load factor. Such new rate is based on an allocation of construction costs to power facilities that has been agreed upon by the Corps of Engineers, the Department of the Interior and the Federal Power Commission. However, the 7.16-mill rate does not contemplate reactivation of the lease-option contracts and, as noted above, does not include any costs for transmission over Central's lines.

RECOMMENDATION

The companies want to continue negotiations with the intent of perfecting an agreement but all parties must recognize that the final charges shall include all appropriate costs by whomever incurred. On the other hand, if Central and its member cooperatives are to receive power below the cost of supplying it, the

companies are not in a position to furnish the subsidy. If the Government is to absorb it, by free hydropower or otherwise, such grant should be clearly labeled as such, and not covered up by bookkeeping devices like the continuing fund or by the fixing of rates below the Government's actual cost. The taxpayers should know what their money is going for, even though they may not agree with how it is being spent.

ARKANSAS-MISSOURI POWER CO. AND MISSOURI UTILITIES CO.

STATEMENT OF GLENN LADD, ENGINEER

PREPARED STATEMENT

Mr. ARNOLD. Lastly, Mr. Chairman, I would like to introduce Mr. Glenn Ladd, who is here in the room, and who would like to file a statement also.

Mr. LADD. I am Glenn Ladd, engineer with the Arkansas-Missouri Power Co. I am authorized to speak for Arkansas-Missouri Power Co., and for Missouri Utilities Co. of Cape Girardeau, Mo.

My statement concerns the negotiations we have had with M. & A. Electric Power Cooperative, relative to working out a solution of the power situation in our area.

Chairman HAYDEN. Thank you. The statement will be included in the record.

(The statement referred to follows:)

JOINT STATEMENT OF ARKANSAS-MISSOURI POWER CO. AND MISSOURI UTILITIES CO.

My name is Glenn Ladd. I am rate engineer for Arkansas-Missouri Power Co. This statement is being made jointly for Arkansas-Missouri Power Co., Blytheville, Ark. (hereafter called Ark-Mo), and for Missouri Utilities Co., Cape Girardeau, Mo. (hereafter called Missouri Utilities). Ark-Mo supplies electric utility service in both Arkansas and in Missouri, and Missouri Utilities supplies such service in Missouri. Our two companies supply electric service in 28 counties in the 2 States.

When M. & A. Electric Power Cooperative completed its 10,000-kilowatt diesel engine driven generating plant and a 69-kilovolt transmission system largely duplicating and overlaying Missouri Utilities' transmission system, it began furnishing electric service to all REA cooperatives once served by Missouri Utilities in that company's inter-connected system area. M. & A. uses as an additional source of power, its 6,000-kilowatt power contract with Southwestern Power Administration, this being a firm power contract. In addition, M. & A. wheels power over its 69-kilovolt transmission system for SPA to supply SPA's contract commitments with the municipalities of Poplar Bluff and Sikeston, Mo., and also has an agreement with SPA for supply supplemental energy to these two municipalities when available and when requested. SPA delivers power to M. & A. over the 154-kilovolt Norfolk-Essex transmission line which was built by SPA.

There are no M. & A. lines in the service area of Ark-Mo with the exception of a line serving one substation near Piedmont, Mo., replacing service formerly supplied by Ark-Mo. All rural electric cooperative load in the interconnected system area of Missouri Utilities is now served by M. & A. A total of three REA cooperatives are receiving service from M. & A. at the present time.

All REA cooperative load in the service area of Ark-Mo is supplied by Ark-Mo from Ark-Mo's 33- and 115-kilovolt transmission system which completely blankets its service area. Ark-Mo's power sources and its transmission system are of ample capacity to supply its own load and that of the REA cooperatives in its service area, and the system has been constructed with the purpose of supplying the entire load growth of Ark-Mo and of the REA cooperatives. All delivery points to REA cooperatives in Ark-Mo's area are supplied from interconnected transmission lines furnishing a two-way source of supply to insure maximum reliability of service.

During the calendar year 1954, Ark-Mo supplied approximately 19,000 kilowatts of power to 6 REA cooperatives at 13 delivery points at an average rate per kilowatt-hour about 25 percent less than the 12.1-mill average rate M. & A. charged the 3 member cooperatives to whom it furnished electric service during the fiscal year ended June 30, 1954.

M. & A. claims that at least 5 of the REA cooperatives to whom Ark-Mo furnishes electric service are members of M. & A. and that it has an obligation to furnish service to these 5 REA cooperatives although it has no electric lines in the area to serve them. It is our understanding that M. & A. now has applications pending with REA for loans to construct lines into Ark-Mo's service area and for construction of additional generating capacity.

There is no need for the use of public funds to construct duplicating transmission lines and generating capacity to serve an area which is already being adequately and fully supplied by Arkansas-Missouri Power Co. at rates which are lower than M. & A. now charges its own members presently being served by M. & A. Our two companies have always supplied the power requirements of the REA cooperatives in their service areas.

It appears that one of the principal objectives of M. & A. is to assume responsibility for furnishing the power requirements of the six cooperatives now being served by Ark-Mo. If they are permitted to do this, either through use of power from SPA, or by means of additional generating capacity installed it will be needless and unnecessary waste and expense and undoubtedly will result in increasing the cost of power to the cooperatives.

Since June 1953, our two companies have been meeting with M. & A. Electric Power Cooperative for the purpose of working out an arrangement for integrating the facilities of M. & A. with those of the companies for the maximun benefit of all concerned. Numerous conferences have been held with M. & A., including 1 conference with Douglas Wright present, and 2 others at which representatives of SPA were present. None of the contractual offers made by us have resulted in an agreement with M. & A. The first basis for negotiation was that the companies would lease all of M. & A.'s facilities and would operate and maintain the facilities and reimburse M. & A. an amount sufficient to enable it to meet its loan payments and other charges. The companies propose to meet the entire load growth requirements of M. & A. members. SPA initially proposed to furnish peaking power to the companies and for M. & A. in an amount sufficient to meet the peaking power requirements of the integrated load, then estimated to be 30,000 kilowatts from SPA at the proposed rate of usage of 200 hours per month.

The latest basis of negotiation proposed by M. & A. is for M. & A. to sell the output of its generating plant to the companies and for it to continue to operate and maintain its 69-kilovolt transmission system. Negotiations are presently continuing on this basis. On one occasion, Missouri Utilities offered to enter into an agreement itself with M. & A. for integration of its facilities and of M. & A. facilities and to supply the entire power requirements of members connected to the 69-kilovolt system, or as might be subsequently connected to its own transmission system, at a rate which would be 8.5 mills per kilowatt-hour at 50 percent load factor. This proposal has not been accepted by M. & A. One joint proposal made by the companies would have resulted in an average cost of power to M. & A. of approximately 9.3 mills per kilowatt-hour and the companies would have assumed all of M. & A.'s generating plant and transmission system loan payments. Rates proposed by our companies to M. & A. have been the lowest possible consistent with existing costs, and with the integration conditions assumed. It is our opinion that if M. & A. takes into account all fixed costs and production, operation and maintenance costs, it will not obtain power from its present or from proposed facilities at a lower cost than has been offered by our companies.

Our companies have repeatedly offered to meet the load growth requirements of M. & A. In all integration proposals made by us, we have made provision for continuing to transmit for SPA its contractual commitments to the cities of Sikeston and Poplar Bluff.

Our two companies, jointly with Arkansas Power & Light Co., of Pine Bluff, Ark., have offered to lease, operate, and maintain the 154-kilovolt Norfork-Essex transmission line and associated substations now owned and operated by SPA and have offered to pay rentals sufficient to reimburse the Government the cost of the line over the 35-year amortization period. It is immaterial with the companies whether the lease is direct with SPA or through M. & A.

Regarding the peaking power which SPA may supply M. & A., or our companies by agreement with M. & A., the amount of such power supplied will have little, if any, effect on the rates which the companies can offer M. & A. Willingness of our

companies to enter into an agreement with M. & A. is not contingent upon determination of the amount of peaking power which SPA will be able to deliver.

In view of the many months of unsuccessful negotiation which we have had with M. & A., it is our belief that if the continuing fund is restored to SPA, it will be increasingly difficult for our companies to conclude successfully a contract with M. & A. We believe, furthermore, that if the continuing fund is restored, M. & A. will press for approval of its pending loan applications to REA for funds to build additional generating capacity and to make additional extensions of its 69-kilovolt transmission system into our companies' territories. We believe further that the output of the additional generating capacity would be sold to SPA and the additional transmission facilities leased to SPA, all for a period of 40 years, with the payment for these services to be made from the continuing fund.

In short, we believe that the continuing fund would be the vehicle for extending further encroachment of Federal power into our companies' territories.

PREPARED STATEMENT

Mr. ARNOLD. If I may, Mr. Chairman, I would like to hand the reporter a list of other persons who are here in the room and who make appearances, but who will not be heard. I would also like to file my prepared statement.

Chairman HAYDEN. That may be done.

(The statement and list referred to follow:)

REPRESENTATIVES OF ELECTRIC COMPANIES OF THE SOUTHWEST AREA APPEARING TODAY (JUNE 20, 1955) BEFORE THE PUBLIC WORKS SUBCOMMITTEE OF SENATE APPROPRIATIONS COMMITTEE

REPRESENTATIVES

Richard L. Arnold	Glenn Ladd
Warren L. Porter	Herbert Branan
Arthur J. Doyle	Ross Harlan
M. C. Boogher	Birt Ridburg
F. H. Shelton	Chas. Daugherty
Richard McPherson	Eugene Kropp
J. D. James	Harold Grove
P. E. McChesney	Chas. M. Custer

ELECTRIC COMPANIES REPRESENTED

Kansas City Power & Light Co.	Arkansas-Missouri Power Co.
St. Joseph Light & Power Co.	Arkansas Power & Light Co.
Missouri Public Service Co.	Oklahoma Gas & Electric Co.
The Empire District Electric Co.	Southwestern Gas & Electric Co.
Missouri Power & Light Co.	Central Lousiana Electric Co.
Union Electric Company of Missouri	Lousiana Power & Light Co.
Missouri Utilities Co.	Gulf States Utilities Co.

STATEMENT OF RICHARD L. ARNOLD

My name is Richard L. Arnold, and I live in Texarkana, Ark. I am a lawyer by profession. I am general counsel of Southwestern Gas & Electric Co., and am 1 of 2 principal counsels for the electric utility companies [1] which were the appellants in the case of *Kansas City Power & Light Co., et al.*, v. *Douglas McKay, et al.*, in which case an opinion was handed down on April 28, 1955, by the United States Court of Appeals for the District of Columbia Circuit. In this litigation the electric utility companies sought a decree declaring invalid loan contracts between the Rural Electrification Administration and certain G. and T. cooperatives in Missouri, including N. W. Power Cooperative, Inc., Central Electric Power Cooperative, Inc., and KAMO Electric Cooperative, Inc., and also certain lease-option and power contracts between Southwestern Power Administration on the one hand and said G. and T. cooperatives on the other.

[1] Kansas City Power & Light Co., St. Joseph Light & Power Co., Missouri Power & Light Co., Missouri Public Service Co., Union Electric Co. of Missouri, Missouri Utilities Co., Arkansas-Missouri Power Co., and the Empire District Electric Co.

I make this appearance on behalf of said appellant companies and also on behalf of other electric utility companies [2] whose names are shown below in full, in opposition to the reinstatement of the lease-option and power contracts mentioned above and in addition, the lease-option and power contracts existing between SPA and Western Farmers Electric Cooperative in Oklahoma. The proponents of this reinstatement seek to accomplish it by means of appropriations from the so-called continuing fund of Southwestern Power Administration or an amendment to the continuing-fund statute which would restore the status of the continuing fund to that which existed after the amendment of said statute of October 12, 1949 (63 Stat. 767), and before the amendment of said statute by the act of August 31, 1951 (65 Stat. 249).

Our opposition to the reinstatement of these contracts is based upon two grounds: (1) legal, and (2) economic. I shall treat first of certain legal aspects of the problem.

A great deal of fundamentally erroneous misinformation has been circulated with respect to the meaning and effect of the opinion of the court of appeals in the case of *Kansas City Power & Light Co., et al.*, v. *Douglas McKay, et al.* It was repeatedly stated by witnesses who appeared before the House subcommittee, which heard the same subject matter as this committee is today considering, that the result of this litigation was that the contracts in issue had been adjudged to be valid and legally binding. The House committee report, moreover, characterizes these agreements as "valid and legal contracts," seemingly on the basis of the opinion of Judge McLaughlin of the district court and the opinion of the Court of Appeals of the District of Columbia Circuit.

Nothing, in my opinion, could be more egregiously erroneous; and I believe a brief excursion into the history of this litigation will be profitable in clearing up this misconception and will demonstrate the truth of what I have just asserted.

The case was filed in the District Court for the District of Columbia on October 3, 1950. Thereafter, on November 11, 1950, the defendants, Messrs. Chapman, Wright, Brannan, Wickard, and Snyder, [3] who were then, respectively, Secretary of the Interior, Administrator of Southwestern Power Administration, Secretary of Agriculture, Administrator of Rural Electrification Administration, and Secretary of the Treasury, filed through their counsel, a motion to dismiss, on the principal ground that the plaintiff companies "* * * have not the capacity to maintain this suit and do not show any injury or interest entitling them to maintain the same." Judge Charles F. McLaughlin, of the District Court, on January 22, 1951, overruled defendants' motion. On October 26, 1951, the defendants filed a motion for summary judgment upon the same, among other, grounds previously asserted in the motion to dismiss; and the motion for summary judgment was similarly overruled on January 11, 1952, by Judge F. Dickinson Letts, of the District Court of the District of Columbia.

The case came on for trial on the merits commencing October 13, 1952, and after an extended hearing, Judge McLaughlin held, in an opinion filed June 22, 1953, that the contracts were valid.

On appeal by the electric companies to the United States Court of Appeals for the District of Columbia Circuit, that court held that the companies were without the capacity and standing to maintain the suit. The court stated its conclusion thusly:

"We conclude that appellees' motion to dismiss should have been granted. In consequence, we do not reach either the substantive or the procedural and evidentiary questions urged on us by the parties.

"The judgment of the district court will be vacated and the case will be remanded to the district court with directions to dismiss the complaint."

The majority opinion of the court of appeals was written by Mr. Justice Washington, with whom Mr. Justice Bazelon concurred. A dissenting opinion was filed by Mr. Justice Prettyman, who held that the companies had standing to sue. He said, in conclusion:

"I think we should proceed to consider other phases of the jurisdictional problem presented by this case, and, if these be resolved in favor of plaintiffs, proceed to the merits as the district court did."

It is, therefore, abundantly clear that the result of this long litigation is precisely as if the trial on the merits in the district court had not been had and the opinion of Judge McLaughlin had not been rendered. The order of the court of appeals

[2] Southwestern Gas & Electric Co., Arkansas Power & Light Co., and Oklahoma Gas & Electric Co.

[3] The defendant Wright is still a party to this litigation, as he has continued on in the capacity of Administrator of SPA. The present Secretaries of Interior, Agriculture, the Treasurer of the United States, and Administrator of Rural Electrification Administration have been substituted respectively for the defendants Chapman, Brannan, Snyder, and Wickard.

is that the judgment of the district court, which was based upon Judge McLaughlin's opinion and findings of fact and conclusions of law, be "vacated"; and, reaching back to the antecedent motion to dismiss filed and argued long before the trial on the merits, the holding of the court of appeals is that said motion be granted and that the complaint be dismissed because of the companies' lack of standing to sue. Nothing, therefore, is settled as to the merits of these contracts by this litigation, and any claim that they have been adjudged valid and binding is unsupported and fanciful.

The overall result of this litigation thus far has generally been fruitless, in the sense that nothing has been settled as to whether these contracts are valid and lawful under the REA Act of 1936, the Flood Control Act of 1944, the "continuing fund statute," or the Constitution of the United States.

The companies assert here today that the lease-option and power contracts between SPA and the G. and T. cooperatives are contrary to law on each of the following main considerations, which are here, of necessity, very briefly stated:

(*a*) Under the Flood Control Act of 1944, SPA is not authorized to purchase any power and energy for commercial resale. It is a marketing agency only, and is authorized to dispose only of electric power and energy produced by the hydroelectric process at reservoir projects described in section 5 of the Flood Control Act. Yet, under the N. W., Central, and Western Farmers power contracts, SPA purchases, for a period of 40 years, the entire output of 3 steam electric generating stations built with REA funds, having an aggregate capacity of 85,000 kilowatts. Nothing in the "continuing fund statute" authorizes or supports the lease-option contracts or the power contracts.

(*b*) The output of Federal reservoir projects in the Southwestern area is peaking power and energy and is a valuable and usable product which is readily salable without the necessity of the Government's entrance into such ventures as the SPA-G. and T. contracts, or into the utility business generally.

(*c*) If the Flood Control Act of 1944 or the "continuing fund statute" should be construed as authorizing the purchase of electric power and energy for commercial resale to the public, each statute is, to that extent, unconstitutional.

That the use of the "continuing fund" to pay charges incurred by the Government under the lease-option and power contracts, and particularly under the latter contracts pursuant to which SPA acquires for commercial resale a large block of thermally generated electric power and energy, is contrary to law, is amply sustained by legislative conclusions reached after careful deliberations by the committees of the Congress and the Congress itself.[4] In this connection, it appears that when the amendment to the continuing fund was sought, in the summer of 1949, instituting language ostensibly authorizing the "purchase of electric power and energy and rentals for the use of transmission lines * * *," in connection with the Interior appropriation bill for fiscal 1950, the report of the Senate committee dated July 13, 1949 (S. Rept. No. 661), stated:

"DELETION OF PROVISION FOR CONTINUING FUND

"With further reference to the Southwestern Power Administration, the committee recommends that the paragraph under the heading 'Continuing fund, power transmission facilities' be deleted from the bill. This provision proposes to set up and maintain from receipts a continuing fund of $300,000, including a sum of $100,000 in the continuing fund established under the Administrator of the Southwestern Power Administration in the First Supplemental National Defense Appropriation Act, 1944.

"The said 'continuing fund' was intended to be used for the 'purchase of electric power and energy and rentals for the use of transmission lines and appurtenant facilities of public bodies, cooperatives, and privately owned companies,' and the committee reports that no law exists authorizing appropriations for such purposes." (loc. cit. 4–5.)

Hon. Carl Hayden, Senator from Arizona, was chairman of the Interior Subcommittee, and conducted the hearings on the Interior Department appropriation bill for fiscal 1950.

This conclusion of the Senate committee caused the proponent of the requested amendment in the Senate to state:

"Mr. President, in the debate on this bill, objection has been made to the provision adopted by the House for the continuing fund for the Southwestern Power

[4] This conclusion has also been sustained by the decision of the Supreme Court of Arkansas in the case of *Arkansas Electric Cooperative Corporation* v. *Arkansas-Missouri Power Co., et al.*, 221 Ark. 638, 255 S. W. (2d) 674, which is the only holding to date by any court upon the merits of this question.

Administration, on the basis that in the language in the bill, the Administrator would be authorized to rent generating facilities from rural cooperatives or others. It was not the purpose of the language of the bill to make that provision." (95 Congressional Record 12023, August 23, 1949.)

And later on the same day (95 Congressional Record 12032), the proponent stated additionally:

"The purpose of the clarifying amendment with reference to the continuing fund is to make it crystal clear that there is no purpose, desire, nor authority for the Administrator to rent any generating facilities with the money in the so-called continuing fund. There is at this time a continuing fund of $100,000. The sole purpose of the language in this bill to increase it to $300,000 is to enable the Administrator to handle the increased volume. The Senate committee has indicated that he may make contracts with utility companies similar to the Texas contract. The Administrator has said it was his purpose to do that. If he does, he will be in the position of selling power on the one hand and buying it on the other hand. The sole purpose of the continuing fund is to enable him to do that; and the sole purpose of the clarifying amendment is to make this crystal clear." (95 Congressional Record 12032, August 23, 1949.)

On the basis of the foregoing statement, the amendment was adopted and embodied in the act of October 12, 1949 (63 Stat. 767). That the Senate relied upon the statements of legislative intent, set out above, in adopting the amendment, clearly appears from Senator McCarran's statement made on July 9, 1951 (97 Congressional Record 7795), on the occasion of the debate in the Senate on another amendment to the continuing fund, which was duly passed and became the act of August 31, 1951 (65 Stat. 249), and which put a limitation on expenditures from the continuing fund to be set by the Congress in annual appropriation acts. Senator McCarran said:

"In requesting expansion of the continuing fund on the Senate floor in August 1949, the impression was given that the continuing fund was necessary to work out contracts with the private companies. On two occasions it was stated that the sole purpose of the fund was to enable the Southwestern Power Administrator to make contracts with the private utility companies similar to the Texas Power & Light Co. contract." (97 Congressional Record 7795, July 9, 1951.)

Senator Cordon of Oregon, during the time the 1951 amendment to the "continuing fund statute" was being debated by the Senate, was a member of the Subcommittee on Interior Appropriations. He is also a distinguished lawyer and well versed in the provisions of section 5 of the Flood Control Act, the "continuing fund statute," and the legislative histories of both.

The Senator stated (97 Congressional Record 7845, July 10, 1951), in reference to the lease-option and power contracts made by SPA with G. and T. cooperatives:

"I wish to concentrate on one thing, namely, the legal aspects of the problem. In my opinion, there was and is no authority justifying Mr. Wright in doing what he sought to do" [make the contract here under consideration].

Senator Cordon further stated (97 Congressional Record 7846, July 10, 1951):

"The Flood Control Act of 1944 does not contain, expressly or by implication, any authority to anyone to purchase any electric power or energy."

The Senator further stated:

"I believe we have before us a matter which needs a little exploration. I believe it goes to the philosophy of the whole question of public power. I shall explore it slightly. The Flood Control Act of 1944 directed the delivery to the Secretary of the Interior of power from Army engineer dams, period. It did not authorize the Secretary of the Interior to buy or sell any power other than the power resulting from the power installations at Federal dams."

THE CONGRESS HAS NOT REPUDIATED ITS CONTRACTUAL OBLIGATIONS

The advocates of the reinstatement of the G. and T. contracts seek to make it appear that the Congress has "welshed" on its solemn contractual obligations, and that the United States of America has repudiated firm and binding agreements. The assertion is, in our opinion, inadmissible.

The lease-option and power contracts provide "all rights and obligations hereunder * * * are expressly conditioned and contingent on the Congress making the necessary appropriations to enable the Government to carry out the provisions of this agreement, and in case the Congress fails to make such appropriations, the cooperative hereby releases the Government from all liability due to the inability of the Government to perform this agreement on that account." In

addition, under the power contracts it is provided that the existing exceedingly low rate schedule A "shall remain in force only so long as rate schedule A (as amended) of the Southwestern Power Administration remains unmodified and effective, and it is understood and agreed that said rate schedule A of Southwestern Power Administration may, with the approval of the Federal Power Commission, be modified at any time or from time to time."

No more unstable rate situation can be imagined. Not only was there no firm commitment contained in the contract, but the cooperatives were expressly put on notice that their rights were subject to subsequent legislative action and to rates which might be raised the very next day after the contract was signed. Clearly the cooperatives have not been hoodwinked or in any manner misled.

ECONOMIC CONSIDERATIONS

The Members of the Senate will undoubtedly recall that under section 5 of the Flood Control Act, the Congress provided:

"Rate schedules [for the sale of power and energy generated at reservoir projects] shall be drawn having regard to the recovery (upon the basis of the application of such rate schedules to the capacity of the electric facilities of the projects) of the cost of producing and transmitting such electric energy including the amortization of the capital investment allocated to power over a reasonable period of years."

The maintenance of a "continuing fund" and the making of appropriations payable therefrom is contrary to the genius, as well as to letter, of this portion of the Flood Control Act. The words indicate a firm congressional belief that proceeds from power sales should be used to amortize capital investment in the power producing facilities of reservoir projects. The taxpayers of the United States of America, we believe, have a right to expect the application of such proceeds in this fashion and that they not be diverted to provide additional generating and transmission facilities for the creation of what, beyond any doubt, would result in a public power trust.

Senator McCarran very cogently made this point before the Senate of the United States in the debate of the 1951 amendment to the continuing fund, when he quoted from Representative Whittington's testimony before the House Appropriations Committee on the Interior appropriation bill for 1947, 79th Congress, part III, page 418, where the Congressman stated:

"I thought it was unwise, and it was not our intention, to give the Secretary of the Interior power to construct transmission lines and other related facilities from the income of the power sale, but to require him to come to Congress for the funds for the construction of transmission lines and other facilities."

Senator McCarran's quotation of Congressman Whittington's statement appears at 97 Congressional Record 7795, July 9, 1951.

It is quite apparent that the use of power revenues to gain for SPA the exclusive use of transmission systems for 40 years, and acquire for a like period of time the entire output of steam electric generating stations, is a diversion of funds which commits the revenues of SPA to purposes which were not contemplated by the Congress and postpones indefinitely and perhaps for all time the amortization of the power portion of capital outlays made by the people of the United States to plan and build reservoir projects. On this ground, if on no other, the revitalization of the G. and T. contracts through the continuing fund should be denied.

The claim that the Congress has in some manner approved or given the green light to these contracts is erroneous. Laying on one side all other considerations, the sole fact that the Congress, alarmed by the extent and manner of the use of the continuing fund, regained control of the purse and thereby control of the actions of Interior, through the amendment to the continuing fund of 1951, is of itself entirely sufficient to demonstrate that there has been no legislative approval of these exceedingly doubtful contractual schemes.

The proponents of the restoration of the G. and T. contracts assert that appropriations from the continuing fund will not cost the taxpayers anything. This statement is incredible. Quite clearly, the diversion of funds through the continuing fund route from the purpose for which the Congress has dedicated them, that is, the amortization of capital costs of the power portion of reservoir projects, costs the taxpayers of the United States funds which they are entitled to have repay outlays previously made, and to say that such diversion involves no burden or liability on the taxpayers is, we believe, nonsensical.

Senator Paul H. Douglas, of Illinois, in an article appearing in the American Magazine for March 1952, commented upon the identical continuing fund now before the committee:

"A clever lawyer is occasionally able to bypass the Federal budget system, which requires that a department of agency report on work done each year before they get the next year's funds. Many attempts have been made to get around this. The latest dodge to flower in the legal mind is called a continuing fund. It was dreamed up by the lawyer staff of the Southwestern Power Administration, a power-marketing agency under the Department of the Interior. This agency, faced by various uncertainties from time to time, got Congress to approve a plan whereby $300,000 was deposited with the Treasury—a sum to be kept constant no matter how much was taken out.

"The scheme was probably innocent. That is, until some lawyers in Interior, itching to build an empire, got to work. In a complex series of leasing deals worthy of an Insull, they got their Interior administrators to commit Southwestern for $66 million out of the original $300,000 before Congress caught on and put a stop to it. They were able to do this because, although the original fund was small, the sum was kept constant. The system, if the intent of Congress had been observed, was a workable one. But after some ambitious and ingenious Interior lawyer got to work, the taxpayer—and that means you and me—was nicked for perhaps $65 million more than Congress intended."

In conclusion I desire to state that the appellant companies in the case of *Kansas City Power and Light Co. et al.* v. *Douglas McKay et al.*, have instructed and authorized counsel to apply to the United States Supreme Court for a writ of certiorari, and this application will be filed within the time allowed by law. In these circumstances we earnestly request that if the Congress sees fit to make appropriations from the continuing fund, that language saving the rights of the companies, similar to that which was included in the statement of the managers on part of the House, Report No. 1926, 83d Congress, 2d session, Interior Department appropriation bill, 1955, be included in the report of this committee or in the conference report, or both. That language is as follows:

"The committee further recognizes that certain lawsuits are now pending in regard to the right of the Federal Government to purchase electric power from steam plants built by generating and transmitting cooperatives with funds borrowed from the Rural Electrification Administration for resale by it to others, and the right of the Federal Government to lease, in their entirety, certain transmission systems constructed with Rural Electrification funds, and ultimately to purchase same. Therefore, the action of the conference committee, in making the above recommendations, is not intended to prejudge the validity of said contracts between Southwestern Power Administration and the various rural-electric cooperatives, nor deemed to be congressional interpretation of applicable law." (Statement of the managers on the part of the House, Rept. No. 1926, 83d Cong., 2d sess., Interior Department appropriation bill, 1955.)

GENERAL STATEMENT

Mr. ARNOLD. I would like to make a very brief oral presentation on behalf of the companies whose names I have already read into the record. I say to you that I could not possibly be in more complete disagreement with the conclusion that has been stated before the House, and I believe repeated here, that the recently decided litigation of *Kansas City Power and Light Company* v. *McKay* has settled the legal validity of these SPA–G. and T. contracts.

Certainly in my view that is not a correct statement. I will say in that regard that I think there is no reason for me to rehearse all of the details of these contracts before you, because I have been here before and I have seen you here every time I have been here. I know you know all about them. But I think a brief excursion into the history of that litigation might be informative and helpful.

KANSAS CITY POWER & LIGHT CO. *v.* M'KAY

I will say the case was filed originally in 1950, and the first legal move the defendants, who by the way were the Secretary of Interior, the Administrator of SPA, Mr. Wright, the Secretary of Treasury,

the Secretary of Agriculture, and the REA Administrator, was to file a motion to dismiss on the grounds that the plaintiff companies had no standing to sue, and no capacity to maintain the suit.

Judge Charles F. McLaughlin, who heard that motion in the district court overruled that motion on January 22, 1951. Immediately thereafter a motion for a summary judgment was filed by the defendants on the same ground. This too was overruled.

The case proceeded to trial and was tried at length in the district court, and finally Judge McLaughlin held that the contracts were valid. That part is correct.

On Appeal to the Court of Appeals for the District of Columbia Circuit, that court held, Mr. Justice Washington writing for the court, that the motion to dismiss filed away back antecedently in the forepart of the proceedings of the district court should have been sustained. The Court said this:

> We conclude that appellee's motion to dismiss should have been granted. In consequence, we do not reach either the substantive or the procedural and evidentiary questions urged on us by the parties. The judgment of the district court will be vacated, and the case will be remanded to the district court with our directions to dismiss the complaint.

I think that is abundantly clear, Mr. Chairman. What happened was that the court of appeals simply said the hearing on the merits was a nullity, it never should have occurred. The antecedent motion should have been sustained, and we hereby direct the court below so to do.

So in my view any claim that these contracts have been settled on the merits by this litigation is insupportable. I think that this committee should pay very careful attention, and I hope you will, to the history that I have undertaken to set out at greater length in my statement.

I want to say to you very briefly what our grounds for asserting the illegality of these contracts are. You have heard part of it before, and I will make it as brief as I can.

PURCHASE OF ELECTRIC POWER FOR RESALE

In the first place, you will recall that the continuing-fund statute as originally enacted had no language which even ostensibly accords the Federal Government the right to purchase electric power and energy for commercial resale. An amendment was sought very vigorously in the summer of 1949, and at that time—Mr. Chairman, you were on the committee—a report was made by this committee that—

> No law exists authorizing the Federal Government to do what it sought to do.

That matter was then debated upon the floor of the Senate, and a proponent of the amendment stated that there was no legislative intent to authorize the Government to "rent any generating facilities." That point was made not only one time, but twice.

Later on it was noticed, I am sure, by you and other Members of the Senate, that the action of the Senate finally in accepting this legislative amendment was based on that representation. We so understood it in the electric utility business, who followed it very closely.

I think my point is underscored and buttressed by a remark made by Senator McCarran, who led the fight for another amendment of the continuing fund in the summer of 1951, which would limit the amounts to be expended therefrom to sums approved by the Congress

of the United States. I say Senator McCarran led the fight on that second amendment, and he stated when he debated the matter on the floor that it was very firmly in his mind that the amendment in the summer of 1949 only came about by reason of the fact that it was represented that the purpose of the amendment was to make new wheeling contracts on the order of the Texas Power & Light Co. contract, and not to be generally going into the utility business as our opponents claim the right here to do.

So it seems to me, gentlemen of the committee, that there is a very firm and very valid legal position here, which, according to the court of appeals, we are at liberty to urge here before this committee, but cannot urge in a court of law, and believe me, that seems to be a deplorable situation. I don't want to let my emotions run away from me in that regard, but the only fruit of this long and tedious and costly litigation has been a direction by the court to the effect that "you have no right to be where you are, that is in the courthouse. If there is a forum anywhere that will hear you, it is the Congress of the United States."

So we are here today, and we appreciate the opportunity to be heard. I must hurry on, because I want to save some time for Mr. Warren Porter.

GOVERNMENT PARTICIPATION IN UTILITY BUSINESS

Another facet of this problem is this. I want to state it as briefly as I can. We are not here opposing the rural electrification movement. That is not our purpose here. I want that to be very definite and firm and certain on this record. What we fear, and what we protest against, is the entry of the United States Government full fledged into the electric utility business. We want that to be firmly understood. We think it is a matter of considerable misfortune that SPA comes forward in the attitude of using the rural electrification movement as a mask. That I think is a supportable conclusion when you review the entire background of these contracts, and the legislative history. We do not want to be on record as opposing these REA cooperatives. We certainly are not opposing them. Many of them are our friends, and we hope they will continue to be. But with all the vigor at our command, we say that these inherent illegalities in these contracts which exist not only under the Flood Control Act, but the continuing-fund statute, and the Constitution of the United States fundamentally, should give this committee pause in making a determination as to whether or not these appropriations should be made.

APPEAL TO SUPREME COURT

Chairman HAYDEN. You say this committee is the only forum. Could you not appeal this case?

Mr. ARNOLD. Yes, sir. As a matter of fact, I am glad you asked that question. We can appeal it. We can apply to the United States Supreme Court for a writ of certiorari. I have been authorized, along with my cocounsel, to make that application. The application will be made within the time allowed by law. You understand that a writ of certiorari is addressed to the sound discretion of the Supreme Court. It is not granted as a matter of right. It is a matter of grace.

Chairman HAYDEN. What is the time limit?

Mr. ARNOLD. The time limit is 90 days, sir, from the time that the motion for rehearing was overruled, and that motion for rehearing was overruled shortly prior to the first of June 1955. The application for the writ is now in process of being prepared, and will be filed within the time allowed by law.

I might say that a very firm statement in that regard has been filed in the Court of Appeals for the District of Columbia Cicuit in a motion to stay the mandate. You understand if a mandate comes down, I don't think it would be detrimental to our case, but we don't want the mandate to come down as long as we are going to pursue this other matter in good faith. Yes, sir, we are going to take the case further. We think we are dutybound to do it.

OBLIGATIONS BASED ON APPROPRIATIONS

Now I want to touch on this claim that the United States Government has welched on a solemn agreement. I cannot accede to that statement. If you will examine the contracts, Mr. Chairman, and I am sure you have, there are two very important contractual provisions written into the face of these agreements in that regard. No. 1 is that all rights and obligations hereunder are subject to appropriations to be made by the Congress of the United States. It goes even further than that. It says that in the event the Congress should fail to make the necessary appropriations, the cooperative hereby releases the Federal Government from its obligation. They have in so many words released the Government by the words of simple import.

In addition to that there is a further contractual provision in there that the rate A—rate A is the presently promulgated and existing rate of Southwestern Power Administration, which is about 5.6 mills, this is the low rate these gentlemen claim they are entitled to—was subject to change at any time or from time to time on order of the Federal Power Commission. That is expressly written into the face of the contract. So I submit to you that there could not be any more unstable or infirm contractual obligation than that. When I say to you yes, I will sell you electric power and energy at 5.6 mills, but tomorrow the rate may be changed, and I write that in the face of your agreement, I say certainly you have no right to claim that you have been hoodwinked or misled or welched on in any fashion if later on that rate does not pan out.

Chairman HAYDEN. The welching was supposed to have been done by Congress.

Mr. ARNOLD. I understand that. I say that the Congress has been accused of welching, and I don't agree with that.

Chairman HAYDEN. Congress directs the authorizing and construction of a battleship that may take 4 or 5 years to build. It appropriates money for the first year, and authorizes contracts to carry on the rest of the work. But any contractor that takes that contract does it subject to appropriation by Congress.

Mr. ARNOLD. I think that is probably correct. But this rate situation, I think, is also in addition to the comment you made, and I believe an important thing.

Now I want to turn very briefly to another aspect of the problem, and that is this question of making appropriations—really it is not a question of making appropriations, it is a question of setting a limitation by the Congress upon amounts that can be expended from a continuing fund. It seems to me that sort of thing is contrary to the genius and to the letter of section 5 of the Flood Control Act. In this regard section 5 clearly envisages that power revenues will be used to amortize the capital outlays made on behalf of the people of the United States in power-producing facilities. Clearly that is what section 5 says. When you come along and say "No, we will not do that, we will take these revenues and we will allow the Interior Department to pay them to an obligor who owes some money to REA," whether or not we will ever amortize these facilities is a matter of conjecture, we will go ahead and pay out cooperative systems now, and buy the output of their 85,000 kilowatts of steam-electric capacity for 40 years, and in the meantime maybe we will get around to paying off the people and maybe we won't, I submit to you that is a matter of grave concern as a matter of congressional policy. It seems to me that in effect what you do is rewrite the fiscal and the power policy of the United States when you authorize the expenditure of funds in that regard.

EKLUTNA PROJECT IN ALASKA

I advert very briefly here to a similar matter that has been before the Congress of the United States in connection with the Eklutna project in Alaska. The correspondence and recommendations relating to this particular matter in which a similar continuing fund was sought are set out in Senate Report No. 1754, May 31, 1950, House Report No. 856, June 20, 1949. In that exchange of correspondence, which I am sure you would find very interesting, Frank Pace, who was then Comptroller General, and later Secretary of the Army, as I recall, took a very firm position in regard to this sort of financial adventure, and said that it was contrary to what had always been done, and that it should not be done in this case, and he recommended against it. My recollection is that it was not done.

I hope that the committee will take the time to examine that.

I want to save the rest of our 30 minutes, which is all too short, for Mr. Porter. In conclusion I want to say to you that this committee has accorded us the kindness in prior years of saving our rights in this long litigation which we have undertaken to fight because we believe we are right, and in the event the committee in its wisdom should see fit to make an appropriation or to set a limitation—I don't think it is an appropriation—of funds to be expended out of the continuing fund, or as an alternative to make an appropriation from operation and maintenance—that would be a true appropriation, I think—I hope in your report you will add some saving language, language which I have set out in my statement, which I will not read, but language which I think would save our rights against a claim advanced by our adversaries in a court that in one manner or another this committee had placed its legislative stamp of sanction and approval on these contracts.

As you no doubt know, sometimes that is a very cogent argument in a court. I hope you will save our rights if you do make this appropriation.

Chairman HAYDEN. I was interested in one statement that you made. If we made this appropriation under the name of operation and maintenance to attain the same result, would that be any better?

Mr. ARNOLD. As a practical matter, it would not be any better for us. If you get shot by a .22 rifle, you are as dead as when you get shot by a shotgun. It has been done, I will say that. It has been done in regard to these so-called interim contracts that have subsisted from 1952, I believe, up to now.

Now, I am not here advocating that at all. No, sir; I don't want to be misunderstood.

Someone has handed me a note that says that Frank Pace was President Truman's budget officer. I am sure you are all acquainted with him.

In conclusion may I direct your attention to what I think is a very telling comment which is included in an article by Senator Paul Douglas of Illinois, in the American magazine for March 1952.

I want to read one paragraph out of this. I think it is a very trenchant observation.

A clever lawyer is occasionally able to bypass the Federal budget system, which requires that a department or agency report on work done each year before they get the next year's funds. Many attempts have been made to get around this. The latest dodge to flower in the legal mind is called a continuing fund. It was dreamed up by the lawyer staff of the Southwest Power Administration, a power marketing agency under the Department of the Interior. This agency, faced by various uncertainties from time to time, got Congress to approve a plan whereby $300,000 was deposited with the Treasury—a sum to be kept constant no matter how much was taken out.

Chairman HAYDEN. What is the date of the Senator's remarks?

ARTICLE FROM AMERICAN MAGAZINE

Mr. ARNOLD. This is an article in the American magazine for March 1952, and I have a photo copy of it here that I would be glad to leave with you. It is a very interesting article. It is entitled "Too Many Lawyers." I don't know that I appreciate the title.

KANSAS CITY POWER & LIGHT CO., KANSAS CITY, MO.

STATEMENT OF WARREN L. PORTER, VICE PRESIDENT

PREPARED STATEMENT

Mr. ARNOLD. I thank you very much, and I will call Mr. Warren Porter.

Mr. PORTER. Mr. Chairman, I have with me Mr. Arthur J. Doyle, attorney for my company, who will hand the reporter the statement which I would like to file with the committee.

Chairman HAYDEN. The statement will be included in the record.

(The statement referred to follows:)

STATEMENT OF WARREN L. PORTER

My name is Warren L. Porter. I am vice president of Kansas City Power & Light Co. of Kansas City, Mo. I have appeared before your committee and testified concerning Southwestern Power Administration matters on several previous occasions. The record will show that in the spring of 1953 I testified that for fiscal year 1954 the appropriations requested by SPA for implementing its power purchase and lease contracts with the four G. and T. cooperatives in

Missouri would, at rates then in effect, result in the Government's paying over $1 million per year for the privilege of giving away some 453 million kilowatt-hours of hydroelectric energy. I stand behind that statement today.

1. Government subsidies under the SPA-G. and T. contracts

Attached are two exhibits which I have prepared. These exhibits demonstrate the extent of the annual subsidies which the Congress would be called upon to provide under the SPA-G. and T. contracts if reactivated. It should be noted that the estimates of additional expense to SPA under the G. and T. contracts are those presented to the committees of the Congress by Mr. Wright. The rates applied to the G. and T. loads are the rates which SPA filed with the Federal Power Commission this past winter. The maximum contract demands used are those set forth in the inactive SPA-G. and T. contracts. The 1956 G. and T. load estimates are based upon the latest information secured from the G. and T.'s or the companies negotiating with the G. and T.'s. In short, I have done no experting but have merely assembled the figures and priced out SPA revenues and costs under the SPA-G. and T. contracts, if reactivated.

It is readily apparent from exhibit A that under the SPA-G. and T. contracts SPA would, during fiscal 1956, pay a cash subsidy of $2,963,000 for the privilege of giving away $283,000 worth of hydro power. SPA's gross revenues from the G. and T.'s during fiscal 1956 would be $3,996,000, and SPA's total cost under the G. and T. contracts would, during the same period, be $7,242,000. This is a total subsidy to the G. and T.'s of over $3,200,000 during fiscal 1956, paid out of the $6 million expenditure authorized by the House.

Admittedly, as the G. and T. loads increase, the size of SPA's annual subsidy would decrease. However, as exhibit B will show, when the load of each of the G. and T.'s increases to the maximum contract demand under its SPA-G. and T. contract (estimated by N. W. to be after 1965), SPA would still be paying an annual cash subsidy of $840,000 for the privilege of giving away $1,572,000 worth of hydroelectric power and energy each year. At such time, SPA's annual gross revenues from the G. and T.'s would be $6,119,000 and SPA's total annual cost under the G. and T. contracts would be $8,531,000. Thus, the subsidy to the G. and T.'s under the SPA-G. and T. contracts, if reactivated, would be over $2,400,000 per year.

The $2 million to $3 million per year subsidy above mentioned does not include additional subsidies, such as freedom from taxation and use of below cost Government funds, which are inherent in all Government-operated businesses.

2. SPA would be in the steam power business

Under section 5 of the Flood Control Act, SPA's sole function and authority is to dispose of surplus hydroelectric power and energy. If the SPA-G. and T. contracts were to be reactivated, SPA would be deeply entrenched in the steam generated electric power business. Examine the attached exhibits. It will be noted (by exhibit A) that in fiscal 1956 all of the energy sold by SPA to the G. and T.'s would in effect be steam generated electric energy produced by the G. and T.'s themselves and (by exhibit B) that in any future year the steam generated energy will never represent less than 72 percent of the electric energy sold by SPA to the G. and T.'s under such contracts if reactivated.

3. SPA would be unable to amortize the Government's investment

As Mr. Wright has already testified before this committee, after 11 years of operation SPA has an accumulated deficit in excess of $6,200,000.

The Comptroller General, in his report to the Congress, made the following finding with respect to the operations of SPA for fiscal 1954:

"Additional revenue necessary to cover cost of producing electric energy and to amortize the Government's investment in projects in operation for the full fiscal year of 1954, $2,582,175."

Under the SPA-G. and T. contracts, SPA's costs would exceed its revenues by some $2 million to $3 million per year. If the SPA-G. and T. contracts were reactivated, SPA's accumulated deficit would continue to increase and SPA would never be able to make a beginning on the amortization of the Government's investment allocated to power as required by section 5 of the Flood Control Act. If deficits are permitted to accumulate for a few years more the total deficiency would be so great that such amortization could never be accomplished by an increase in rates. For that reason alone, no funds should be made available to SPA out of the continuing fund, except after provision out of revenues to meet amortization of the Government's investment allocated to power.

4. Negotiations with the G. and T. cooperatives

In the conference report accompanying the 1953 Interior Department appropriations bill (H. Rept. 2451, July 3, 1952), the committees of the Congress expressed the hope that SPA and the electric companies would, at any early date, consummate a contract that would make unnecessary any further litigation concerning SPA'sp ower purchase and lease contracts with the G. and T. cooperatives. The following year Congress denied appropriations requested by SPA for the performance of the G. and T. contracts, and the committees of the Congress directed the Department of the Interior, the cooperatives, and the companies in the Southwest area to work out substitute permanent arrangements which would not require the continued use of Government funds.

On October 1, 1953, negotations between the G. and T. cooperatives and the electric companies in Missouri and Oklahoma were initiated at a meeting held in Springfield, Mo. It was agreed that each of the G. and T. cooperatives should work with the electric companies in its own area, with general coordination provided, by regional meetings from time to time. This program has, in general, been carried out.

Kansas City Power & Light Co. took the lead in separate negotiations with N. W. Electric Power Cooperative, Inc.; Union Electric Co. of Missouri and Missouri Power & Light Co. with Central Electric Power Cooperative; the Empire District Electric Co. and Missouri Public Service Co. with KAMO Electric Cooperative, Inc.; and Oklahoma Gas & Electric Co. and Public Service Co. of Oklahoma with Western Farmers Electric Cooperative. In each of these separate negotiations, the parties were confronted with certain facts from which there was no appeal. The G. and T. cooperatives had incurred debts to REA totaling approximately $70 million for construction of generating and transmission facilities which were substantially completed. Without the Federal subsidies contemplated in the SPA G. and T. contracts, the G. and T. cooperatives faced with substantial annual losses if they were to sell energy to their member cooperatives at rates then being paid by the member cooperatives to the several companies in the area.

For example, it was recognized by representatives of N. W. and Kansas City Power & Light Co. that N. W.'s problem was, in large measure, created by its having built facilities greatly in excess of its present or immediately prospective needs. If N. W. was not to default on its debt to REA there appeared to be only three possible alternatives, namely: (1) Continued direct Government subsidies through contractual arrangements with SPA; (2) independent operation at greatly increased rates to N. W.'s member cooperatives; or (3) an integration of N. W.'s facilities and power resources with those of the company. The first of these three alternatives, namely, Government subsidies, had already been eliminated by the Congress. Under independent operation any increase which reasonably could be borne by N. W.'s member cooperatives would fall far short of meeting N. W.'s deficit, estimated to be in the order of $1 million per year at existing rates to N. W.'s member cooperatives.

5. Missouri plan of integration

It was readily apparent that integration by the G. and T. cooperatives and the companies could achieve substantial savings for the G. and T.'s by securing for them the full value of the hydroelectric power and energy which the G. and T.'s are entitled to purchase preferentially from SPA. All interested parties recognized (*a*) that such hydroelectric energy as is available from SPA projects has its greatest value when used to supply peaking power; that is, when available water is conserved during light load periods and utilized more rapidly during peak load periods so as to substitute for the maximum amount of thermal generating capacity which would otherwise be required; (*b*) that such peaking power would have even greater value in the much larger loads of the integrated systems of the companies and cooperatives; and (*c*) that under section 5 of the Flood Control Act of 1944, the G. and T.'s are entitled to purchase from SPA hydroelectric power and energy "at the lowest possible rates * * * having regard to the recovery * * * of the cost of producing and transmitting such electric energy, including the amortization of the capital investment allocated to power."

In December 1954, after extensive reappraisals of its water resources as a result of the unprecedented 3-year drought in the southwest area, SPA filed with the Federal Power Commission for approval a base rate of 7⅓ mills per kilowatt-hour for hydropeaking energy (based on 1,800 kilowatt-hours per kilowatt-year delivered under a reasonably flexible schedule). In Missouri, the full value of such hydropeaking energy delivered at the market will range from 10 to 14 mills per

kilowatt-hour as determined by the cost to the companies of substitute generation. Essentially, then, the G. and T. cooperatives could achieve substantial economies through integration with the electric companies in their respective areas by preferentially purchasing hydropeaking energy at its cost to the Government and selling such hydropeaking energy at its full value to the companies. From this differential in selling price over cost of hydropeaking energy, the G. and T. cooperatives would be able to reduce their total costs of operation to reasonable limits.

The plans of integration negotiated by each of the Missouri G. and T.'s and the respective companies vary in detail, but all contemplate an integration similar to that established in the SPA-Brazos Cooperative-Texas Power & Light Co. contract for the output of Whitney Dam. Under such plans, the generating and transmission cooperatives will continue to own, maintain, and operate their steam-electric plants and transmission systems and will make capacity in such facilities available to the companies. The companies will not lease and will have no option to purchase such facilities but will make payments or credits to the G. and T.'s commensurate with the capacities made available to them. The G. and T.'s will sell or exchange their hydroelectric power and energy to the companies at rates reflecting its full value in the integrated G. and T. and company systems, together with the output of their steam-electric plants as scheduled by the companies, and will receive their continuous firm power and energy requirements from the companies at agreed rates based on actual cost of production. Under the various proposals and offers made by the companies to the Missouri cooperatives, it is estimated that if sufficient quantities of hydro are made available to the G. and T.'s, the net cost to the several G. and T.'s for power and energy at the load centers of their member cooperatives would be in the range of 7¾ mills to 9¾ mills per kilowatt-hour, depending on transmission investments, fuel costs, and the degree to which the generating and transmission facilities are available and useful to the companies.

The companies have entered into these negotiations with the generating and transmission cooperatives with a firm determination to solve the problem. Our prime consideration has been to work out integration agreements that will result in the delivery of power at the cooperatives' load centers at the lowest rates possible without injury to our other customers or to our investors. The companies have a vital interest in solving this problem in a manner which does not accomplish the real purpose of the SPA-G. and T. contract, i. e., the federalization of electric industry in the Southwest. This we have always opposed and will continue to oppose in every way available to us.

The task of negotiating and drafting N. W.'s hydropower agreement, which, by concurrence of all parties, was designed to serve as a pattern for all such agreements between SPA and the generating and transmission cooperatives, has been a laborious and time-consuming one. The language of such a hydropower contract was not agreed to by SPA until May 10, 1955, just 40 days ago. The fact that these negotiations have not as yet resulted in contracts for the integration of the company and generating and transmission systems should not be construed as indicating a lack of diligence, good faith, or reasonable proposals by either party. The negotiations and drafting of a hydropower agreement was a necessary prerequisite to the drafting of integration agreements by the G. and T.'s and the companies.

The statements filed by other company representatives will report the up-to-date status of negotiations with the generating and transmission cooperatives other than N. W. Until very recently, Kansas City Power & Light Co. had every reason to believe that negotiations with N. W. were approaching a successful conclusion. On February 9, 1955, Mr. F. A. Martz, manager of N. W., and I signed a joint statement, for his possible use in an appearance before this committee, stating, in effect, that we were in substantial agreement on all matters affecting our integration except that no final determination of rates and costs could be made until completion of the hydro agreement between N. W. and SPA. Since that time agreement has been reached on estimates of costs submitted by N. W., and we have made rate proposals based on estimated amounts of hydroelectric power and energy. The nature of the ensuing discussions leads us to believe that our proposals were not unacceptable to N. W. Such proposals to N. W. based upon N. W.'s estimated loads and costs and assumed amounts of hydropower and energy will result in an average net cost to N. W. for power and energy at its member cooperative load centers of less than 9¾ mills per kilowatt-hour.

As late as March 15, 1955, the Appropriations Committees of the Congress continued to urge SPA, the cooperatives and the companies to complete satisfactory arrangements for marketing SPA power in the area (Ch. VIII, Rept. No. 207, on H. R. 4903).

However, on May 19, 1955, before the House subcommittee, N. W. joined other generating and transmission cooperatives in urging that N. W.-SPA power lease contracts be reactivated. I am therefore unable to state to the committee that an agreement between N. W. and Kansas City Power & Light Co. is in prospect. I believe I can assure the committee that if the SPA generating and transmission contracts are not reactivated, N. W. and the company can reach an early agreement.

6. Farmer's electric bill

For the average farm load, which in the case of N. W. is less than 200 kilowatt-hours per month, the difference between SPA's base rates under SPA's subsidized plan and the net rates generally proposed by the companies under the Missouri plan of integration would mean less than 50 cents per month on the farmer's electric bill. To provide such reduction, the Congress would be called upon to provide an annual subsidy of $2 million to $3 million each year under the SPA generating and transmission contracts, if reactivated. Part of this subsidy represents sheer waste, and does not accrue to the benefit of the farm customers. The companies have proposed to integrate with these generating and transmission's on a basis which will enable them to make rates to their member cooperatives lower than the rates paid by member cooperatives to 15 out of the other 18 active generating and transmission cooperatives in the United States.

7. Appropriations for fiscal 1956

Negotiation of permanent integration agreements under the Missouri plan have progressed over the past 20 months. Such negotiations have continued even during the pendency of this appropriations bill before the Congress. Under the Missouri plan of integration, the companies will receive no preference because the companies will pay the G. and T.'s the full value of the hydro peaking energy and the companies will receive no financial benefit therefrom; the G. and T.'s will have an unlimited firm supply of continuous power and energy at rates reflecting economies from the much larger and more efficient steam-electric plants of the companies. Such integrations would immediately provide the cooperatives a legitimate profit on the hydroelectric power and energy which they are entitled by law to purchase, thus reducing their costs without resort to Government subsidies. Reactivation of the SPA–G. and T. contracts would probably effectively end negotiations and preclude such a solution; and these G. and T. cooperatives would be committed to a program of coming each year to future Congresses for their annual subsidy.

If the G. and T.'s need financial assistance during fiscal 1956 pending conclusion of permanent integration agreements under the Missouri plan, the companies do not oppose, as an interim stopgap measure, an appropriation to Interior of a specific sum for operation and maintenance for SPA to implement interim arrangements between Interior and the Missouri and Oklahoma G. and T.'s.

EXHIBIT A

Loss to Government or subsidy to G. and T.'s under SPA–G. and T. contracts, if reactivated, fiscal year 1956

G. and T. requirements:

	Contract demand, kilowatts	Estimated actual load	
		Demand, kilowatts	Energy at 50 percent load factor, kilowatt-hours
Central and Sho-Me	70,000	55,000	
N. W.	30,000	53,000	
KAMO	30,000		
Western Farmers	30,000	30,000	
Total	160,000	138,000×4,380	604,000,000

Revenue to SPA: (at rate A as filed by SPA on Dec. 29, 1954, reflecting 10 percent discount from base rate):

			Mills per kilowatt-hour sold to G. and T.'s
Demand charges: 160,000 kilowatts at ($0.65×12)		$1,248,000	
Energy charges:			
160,000×150×12=288,000,000 kilowatt-hours, at $0.0045		1,296,000	
Remainder, 316,000,000 kilowatt-hours, at $0.006		1,896,000	
Total, 604,000,000 kilowatt-hours		4,440,000	
Less 10 percent discount		444,000	
Total revenue to SPA		3,996,000	6.61
Cost to SPA:			
Payments to G. and T.'s: (for purchase of power, wheeling, and rental of G. and T. facilities):			
Amount in budget request (H. R. Tr. 60)	$224,000		
Increase with G. and T. contracts (Senate, June 7, 1955)	5,335,000		
		5,559,000	
Other added costs (Senate, June 7, 1955):			
Operation and maintenance of leased G. and T. facilities		610,000	
Power contracts and rates		22,000	
General administration		413,000	
Replacement of G. and T. facilities (H. R. Tr. 62)		355,000	
Total cash cost to SPA		6,959,000	11.52
(Net direct cash loss to SPA, $2,963,000.)			

Hydro supplied by SPA:	*Kilowatts*	*Kilowatt-hours*			
G. and T. requirements	138,000	604,000,000			
Steam generation (less losses)	85,000	616,000,000			
Hydro peaking capacity [1]	53,000		at $5.85	310,000	0.47
Hydro primary energy [1]		−12,600,000	at $0.00225	(27,000)	
Total cost to SPA				7,242,000	11.99
Less revenue to SPA				3,996,000	6.61
Net loss to SPA				3,246,000	5.38

[1] Priced at its cost at reservoir as reflected by SPA's filed initial rate for wholesale peaking service (rate P. S.).

EXHIBIT B

Loss to Government or subsidy to G. and T.'s under SPA–G. & T. contracts, if reactivated—Ultimate condition: Loads equal to ultimate contract demands

G and T. requirements:

	Demand kilowatts	Energy at 50 percent load factor, kilowatt-hours
Central and Sho-Me	70,000	
KAMO	55,000	
N. W	40,000	
Western Farmers	30,000	
Total	195,000×4,380	854,000,000

					Mills per kilowatt-hour sold to G. and T.'s
Revenue to SPA (at rate A filed Dec. 29, 1954):					
Demand charges: 195,000 kilowatts at ($0.65×12)				$1,521,000	
Enegy charges: 195,000×150×12=351,000,000 kilowatt-hours at 0.0045				1,580,000	
Remainder, 503,000,000 kilowatt-hours at 0.006				3,018,000	
Total revenue to SPA, 854,000,000 kilowatt-hours				6,119,000	7.16
Cost to SPA:					
Payments to G. and T.'s (for purchase of power, wheeling, and rental of G. and T. facilities):					
Amount in budget request (H. R. Tr. 60)			$224,000		
Increase with G. and T. contracts (Senate, June 7, 1955)			5,335,000		
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General administration				413,000	
Replacement of G. and T. facilities (H. R. Tr. 62)				355,000	
Total cash cost to SPA				6,959,000	8.15
(Net direct cash loss to SPA, $840,000.)					
Hydro supplied by SPA:	*Kilowatts*	*Kilowatt-hours*			
G. and T. requirements	195,000	854,000,000			
Steam generation (less losses)	85,000	616,000,000			
Hydro peaking capacity [1]	110,000		at $7.80	858,000	
Hydro primary energy [1]		238,000,000	at $0.003	714,000	1.84
Total cost to SPA				8,531,000	9.99
Less revenue to SPA				6,119,000	7.16
Net loss to SPA				2,412,000	2.83

[1] Priced at its cost at reservoir as reflected by SPA's filed base rate for wholesale peaking service (rate P. S.).

GENERAL STATEMENT

Mr. PORTER. Mr. Chairman, I propose to use what little time I propose to take by a mere highlighting of this statement. I would first direct your attention to the two exhibits which are attached to that statement, labeled "Exhibits A and B," which I have introduced under the head of "Government Subsidies under the SPA G. and T. Contracts."

Exhibit A deals with the fiscal year 1956, and the estimated loads of the G. and T. cooperatives, namely Central and Sho-Me, N. W., KAMO and Western Farmers, according to the best information we can get from the G. and T. cooperatives themselves through the companies who have been negotiating with them.

The estimated loads of those cooperatives in the year 1956 total 138,000 kilowatts, which at a load factor of 50 percent, commonly used in such calculations, would require energy in the amount of

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The estimated loads of those cooperatives in the year 1956 total 138,000 kilowatts, which at a load factor of 50 percent, commonly used in such calculations, would require energy in the amount of

604 million kilowatt-hours. The G. and T.'s, under the presently inactive contracts, are required to pay SPA on the basis of their contract demands or their actual demands, whichever are greater. The billing for 1956 would, I assume, be billed under those contract provisions, which would mean that the cooperatives would pay demand charges totaling 160,000 kilowatts, but would pay only for the energy which they actually used.

That power and energy I have priced at rate A, as filed by Southwestern Power Administration on December 29, 1954—in other words, the increased rate which it is now proposed to charge for such service—and which reflects a 10 percent discount during an initial period. The revenue is calculated, with the mathematics shown so that they may be readily checked, amounting to $3,996,000.

Immediately below that I have shown the cost to SPA. I want to state at this point that I did no estimating of my own with respect to the cash costs. I simply took the figures presented by Southwestern Power Administration witnesses in connection with their budget request for fiscal 1956.

Take, for example, the amount I have shown as payments to G. and T.'s for purchase of power, wheeling and rental of G. and T. facilities. According to the testimony filed with the House subcommittee on May 6, 1955, there was already $224,000 included in the budget request for payments to these G. and T.'s for those purposes. It was also testified in both the House and Senate, and I refer specifically to the figure given to this committee on June 7, that the increase over that amount would be $5,335,000, or a total of $5,559,000 to be paid to the G. and T. cooperatives by SPA for the fiscal year 1956.

It will be observed that that amount is already greatly in excess of the total $3,996,000 total revenues to be expected by SPA from that source.

Then there are other added costs testified to by the Administration witnesses, i. e. operation and maintenance of leased G. and T. facilities, power contracts and rates, general administration, and replacement of G. and T. facilities, making a grand total, including the cash payments to the G. and T.'s, of $6,959,000, which it will be observed, is $2,963,000 more than the total revenues which SPA can expect to receive from those G. and T. cooperatives.

That is not quite the end of the story, and here a certain amount of estimating is necessary. The total G. and T. load of 138,000 kilowatts is 53,000 kilowatts in excess of the total steam capacity which SPA will acquire from the G. and T. cooperatives under these contracts. It is somewhat more than that in excess of the firm capacity which SPA will secure in that way, but I have waived that point in this calculation. The value of that hydro or its cost to SPA, it seemed to me, is best measured by the rate which SPA has filed with the Federal Power Commission as a proposed rate for wholesale peaking service for sale of hydro power at the reservoir, under which in this same initial period the demand charge is $5.85 per kilowatt of demand per year, and the primary energy charge is 2.25 mills per kilowatt-hour. It is true that under this arrangement SPA would secure from the G. and T.'s slightly more energy than it resells to them, but very much less capacity. An exact analysis of the value of that hydro would be a complicated matter, and subject to a wide range of opinion. A simple calculation is, as I have shown, to simply credit the arrange-

ment with the excess of energy and charge it with the deficiency in capacity at the rates set by the SPA for such service at the reservoirs.

In the overall result the net loss to SPA in the year 1956 would be $3,246,000. This loss is substantially half of the total amount which has been requested in the budget for the implementation of these contracts, and represents in our minds a direct loss to the Treasury of the United States and a corresponding subsidy to the G. and T. cooperatives.

At this point I would like to say that I do not believe that all of the loss to SPA and to the taxpayers will be balanced by a corresponding gain to the G. and T.'s. Some of it, and a considerable portion of it, may represent sheer waste by reason of having failed to cash in on the real value of the assets which SPA has in the form of hydro peaking power.

I will discuss exhibit B much more briefly because it deals in a similar fashion with the ultimate demands and ultimate loads under these contracts. Each one of these contracts provides a maximum amount of power which is to be covered by these contracts. I think each of them has provisions that if additional power is available, it can be contracted for, but it is not covered necessarily by the provisions of the contracts which we are discussing.

For the purpose of this exhibit B, I have assumed that the loads in some future year will actually equal those maximum contract demands. The revenues are computed at the base rate A, which is on file with the Federal Power Commission, and which, at that time, will no longer be subject to the 10-percent discount. The cost to SPA is exactly as in exhibit A, so far as the cash costs are concerned. Exhibit B shows that there still remains a direct cash loss to SPA of $840,000 per year.

APPLICATION FOR INCREASED RATES

Chairman HAYDEN. I understand there is an application before the Federal Power Commission to increase the rate. Would that make a difference in the calculation?

Mr. PORTER. The rates I have applied, sir, are the increased rates which have been applied for.

The hydro to be supplied by SPA in this case, it will be observed, will be very much greater than in the initial period. The G. and T. requirements will total 195,000 kilowatts, which is 110,000 kilowatts in excess of the steam capacity acquired by SPA. The hydro energy required will be 238 million kilowatt-hours. This hydro power and energy, priced as before at the filed wholesale peaking service rate, but without the initial discount, brings our total cost to SPA to $8,531,000, which is $2,412,000 in excess of the revenues to be derived by SPA from these G. and T. contracts.

That, Mr. Chairman, is a familiar story in the sense that I have been before you before and presented similar evidence. It is my opinion that these contracts would result in the Government actually paying a premium to someone to induce him to take hydroelectric power and energy for free. SPA is the marketing agency for that hydroelectric power and energy from those reservoir projects under a mandate from the Flood Control Act to dispose of it under sound business practices. It seems to me that is one provision of the Flood Control Act that is being ignored. Great attention is being paid to

the preference clauses and some other features, but very little attention is being paid to the phrase about sound business practice, and the obligation to first of all amortize the Government's investment in these reservoir facilities.

So if this sounds like a repetitious statement, it is simply because nothing that has transpired in these years has served to remedy that situation. Not even this increased rate that SPA now has on file for approval by the Federal Power Commission is by any means sufficient to remedy the thing we have been talking about all these years.

Chairman HAYDEN. What we are asked to do now is to go back and reinstate the contracts that Congress did not implement in fiscal years 1954 and 1955. As a businessman, in your opinion, if we had not made the change, and the thing had been carried on the way it was intended, would these losses that you have indicated have accrued?

Mr. PORTER. Yes, sir, they would have. The ultimate condition which I have shown in exhibit B seems to me to indicate that there is no hope of working out of this situation through increased loads. It is true that SPA will presumably acquire in this deal some excess transmission capacity. But without burdening you with the figures, sir, the best deal that I can think up for SPA in future years falls far short of ever liquidating the deficiency that they are faced with if these SPA–G. and T. contracts are reactivated. In other words, by additional sales it would not in my opinion ever be possible to bring SPA out of the red.

The SPA, by the administration's testimony, is some $6 million in the red at the end of fiscal 1955. These exhibits indicate that if these contracts are reactivated, that deficiency is going to continue to accumulate at an accelerated yearly rate of some 2 or 3 million dollars more. I see no possibility that SPA will ever be able to make a beginning on the amortization of those reservoir facilities as required by the Flood Control Act.

I believe there are sound solutions to be reached in this matter, but they must be based on economic facts if they are to be sound solutions. Otherwise, somebody is holding the bag. Under these contracts, it is the Treasury of the United States.

I would like to refer very briefly to the negotiations which we have with the G. and T. cooperatives. In my own case, these negotiations have been almost entirely with the N. W. Cooperative, which operates in the same general area we do. My discussions have been primarily with Mr. F. A. Martz, manager of that cooperative, and to a very large extent with members of his board, and their attorney. They have been very satisfactory negotiations, although for very valid reasons there have been long delays. It has taken a long time to get anywhere near an answer. I say those are valid reasons, because among other things we had to work out in great detail a draft of a hydro contract between the G. and T. cooperatives and the Southwestern Power Administration. We worked with Mr. Wright and his staff, and the Assistant Secretary, and his staff, on many occasions. That was a long and laborious process which was complicated and delayed somewhat by the drought conditions which necessitated that SPA find out how much power it actually has under the most adverse conditions. I think everybody put his back into that problem, but of necessity it was a long process.

I note that Secretary Aandahl mentioned that it was necessary first of all to have an agreement between the cooperative and the company before he could draft a suitable hydro contract. He is quite right. I would like to add it was also necessary for us to have a suitable hydro contract before we could make the other. What actually happened is that we started with the contract between the companies and the cooperatives as far as we could go and set up general principles, and there was very little disagreement. Then we got together with the Administration with respect to the hydro contracts. So it was actually a three-part deal. After we got some assurance as to what the hydro contract would be, we went back to the company negotiation with the G. and T.'s.

NEGOTIATIONS WITH G. AND T. COOPERATIVES

Chairman HAYDEN. When did the negotiations start?

Mr. PORTER. On October 1, 1953, we had our first meeting with the cooperatives. That was a large meeting of G. and T. cooperatives and companies in Missouri and Oklahoma. We laid out a general program and expressed our mutual desire to cooperate, and went back home, and each went to work.

We have had since that time a number of general meetings at which we aimed at general coordination of the efforts of the several groups.

Chairman HAYDEN. This committee has been assured from time to time that negotiations were about complete and the contracts were about to be made, but they have not been made yet.

Mr. PORTER. Mr. Chairman, I must report this to you, that up until late this spring, we thought we were about to complete the negotiations with N. W. But I must also report that about a month ago, I believe it was, N. W. joined the other cooperatives in asking for reactivation of the old G. and T. contracts, which leaves me in the position of being unable to tell you what the future of our negotiations with N. W. will be. Perhaps they can tell you.

SETTLEMENT OF COURT LITIGATION

Senator DWORSHAK. Will any further efforts be made to settle this litigation in court?

Mr. PORTER. I suggest that Mr. Arnold speak to that.

Senator DWORSHAK. I intended to ask him that question. Will any further efforts be made to settle this entire litigation in the courts?

Mr. ARNOLD. Yes, Senator. As I indicated a while ago, an application for a writ of certiorari will be filed with the Supreme Court of the United States.

Senator DWORSHAK. Will that finally take care of it?

Mr. ARNOLD. If the Court accepts our plea and hears us, then the Court will have to determine this matter of standing to sue. It may or may not determine on the merits. It is a rather technical thing. If the Court will let us in the front door in the first instance, and would hold that we have standing to sue, it might send us back to the court of appeals.

Senator DWORSHAK. How much time will that require?

Mr. ARNOLD. I wish I knew, sir. It is the only route that we know that a citizen has to seek redress, that, and this route we are pursuing here today.

APPELLATE COURT OPINION

Senator DWORSHAK. You were not very well pleased with the opinion handed down by the appellate court from a legal standpoint?

Mr. ARNOLD. No, sir; I was not. I reserved my ancient prerogative of retiring to the nearest tavern to curse the court.

Senator DWORSHAK. It is pretty difficult for Members of Congress dealing with a problem like this for a few minutes or a few hours during an annual session, when the courts and you people who are living with this issue every day in the year are unable to reach a settlement.

Mr. ARNOLD. It is indeed. I sympathize with you, sir.

Mr. PORTER. Mr. Chairman, in further answer to your question about the time element, I might say it was not until about 40 days ago that we got an agreement with SPA on even the language and general provisions of this hydro contract. We do not as of now have any commitments as to quantities of hydro which would be made available to the transaction.

Chairman HAYDEN. Thank you for your statement.

Mr. PORTER. Thank you, sir.

Chairman HAYDEN. The committee will now hear from the G. and T. representatives.

G. AND T. COOPERATIVES

STATEMENT OF HENRY W. BLALOCK, 9211 KINGSBURY DRIVE, SILVER SPRING, MD.

GENERAL STATEMENT

Mr. BLALOCK. My name is Henry Blalock. I live at 9211 Kingsbury Drive, Silver Spring. I am presently employed by three of the G. and T. cooperatives represented here this morning. Those three are Central Electric Power Cooperative of Jefferson City, Mo.; Northwest Electric Power Cooperative of Cameron, Mo.; and Western Farmers Electric Cooperative of Anadarko, Okla.

I work in the capacity of a special assistant to the managers and directors of these three cooperatives.

Mr. Chairman, we have quite a number of our people here. Of course we know in the 30 minutes time not many of them can appear, but we would like to introduce them to you so that you may know that they are here.

I am not sure that all of these names are present. I have not had a chance to check.

Chairman HAYDEN. You may announce the names, and the reporter will make them of record.

Mr. BLALOCK. Thank you. We have Mr. Lloyd Evans of Fairfax, Okla., president of KAMO Electric Power Cooperative; Mr. H. G. Templeton, from Hollis, Okla., president of Western Farmers Electric Cooperative; Mr. Cecil Neely, from Sayre, Okla., who is manager of the North Fork Electric Cooperative; Mr. H. M. Dillon, from Okmulgee, Okla., who is manager of East Central Electric Cooperative; Mr. Billie Bryan from Binger, who is manager of Caddo Electric Cooperative; Mr. Doyle Pope, of Norman, who is a director of Western Farmers Electric Cooperative; Mr. Jess Hedges, who is a director of Western Farmers Electric Cooperative; Mr. Wilfred Johns

from Quinlan, who is a director of Northwest Electric Cooperative; Mr. Otha Beard, from Wilburton, Okla., manager of the Kiamichi Electric Cooperative; Mr. Jack Gambrell from Hugo, manager of the Choctaw Electric Cooperative; Mr. D. G. McCellan, from Lindsay, manager of the Rural Electric Cooperative; Mr. Floyd Gibson, from Oklahoma City, manager of Oklahoma Statewide Electric Cooperative; Mr. T. H. Ketels, from Walters, Okla., who is a director of Western Farmers Electric Cooperative. He has appeared before you many times, and I am sure you recognize him. D. W. McCalman, from Durant, Okla., who is manager of Southeastern Electric Cooperative; Mr. Arlis Wright from Mena, Ark., manager of the Rich Mountain Electric Cooperative.

We also have U. J. Gajan, manager of the South West Louisiana Electric Cooperative at Lafayette, La. I believe, Mr. Chairman, that his cooperative has the distinction of being the largest in total membership of any cooperative in the United States.

We also have Mr. D. N. Beasley, from the Deep East Texas Electric Cooperative, San Augustine, Tex. He is the manager of that cooperative.

Mr. Milton T. Potts, who is the manager of Sam Houston Electric Cooperative, at Livingston, Tex.

We also have with us Mr. Alex Radin, who is the general manager of the American Public Power Association, and I am sure you know Mr. Radin.

We have with us, too, Mr. Foley Treadway, who is our technical expert. He is an engineer with Southern Engineering Co. of Atlanta, Ga.

We have Mr. William Wise, attorney, who formerly was the deputy director of the Rural Electrification Administration.

Mr. Truman Green, who is the manager of the Central Electric Cooperative.

Mr. F. A. Martz, who is the manager of the Northwestern Electric Cooperative.

Now, Mr. Chairman, I would like to request permission for them to offer their written statements for the record at the conclusion, rather than now, if I may, to save time.

Chairman HAYDEN. That may be done.

Mr. BLALOCK. So if they will come forward then and give their statements to the clerk, we would like for them to be put in the record.

(The statements referred to follow:)

STATEMENT OF LLOYD EVANS

Mr. Chairman and members of the committee, my name is Lloyd Evans. I live in the village of Fairfax, Okla. I am a member of the board of trustees of Indian Electric Cooperative of Cleveland, Okla., and I am president of the board of KAMO Electric Cooperative of Vinita, Okla., which has an extensive system of transmission lines in Oklahoma and Missouri. I am just a country boy, short on education and very limited in knowledge of the technicalities of electrical engineering. However, I have been in this rural electric cooperative program for over 12 years and believe I have a fair understanding of its policies, principles, objectives and problems.

I am intensely and deeply concerned in the farmers' interest in rural electrification. You gentlemen of the Senate know—you need not be repeatedly reminded—of how much rural electrification has meant, and does mean, to the farm folks all over our great Nation. These farm folks compose through organization, and they are, the rural electric cooperatives. These farm folks, tilling the soil, raising

and marketing produce, grain, poultry, hogs, cattle, to provide food for the ever-growing, fast-increasing population of our Nation, and especially the booming great metropolitan cities, these same farm folks make up the G. and T.'s (generation and transmission cooperatives) whose representatives are appearing before you now, presenting what we think is the best plan to solve our problems and assure our future welfare, and particularly the welfare of the G. and T. cooperatives which the farmers organized to insure their distribution cooperatives a plentiful supply of power at low cost.

We have only one plea to make of this committee and this Congress: Make it possible for the Southwestern Power Administration to reactivate the contracts we have with SPA, with the modifications as explained.

For our purposes and intent, the SPA contracts reactivation as now proposed is the best plan, most simple, most sensible, less complicated, and most satisfactory to the best interests of the farmers' electric cooperatives of the Southwest area Likewise, it is the most advantageous and profitable to the existence and operation of SPA.

For the past 2 years we have been thrown off on another track by the present administration on a theory of a policy that we should try to make integration contracts with the electric utility corporations in our area as a substitute for the SPA-cooperatives contracts. In this long time we have been "spinning our wheels" and getting practically nowhere. The cooperatives, the companies, Interior, all have been "spinning their wheels," and the Southwestern Power Administration has been going in the red as the result of conditions the policy has created. Not only that, the G. and T. cooperatives have been thrown into serious financial difficulties as the result of the 2-year experiment.

The companies have proceeded very cautiously and fearfully in this experiment. It is more than an ordinary question to them. They don't want to get into something that might lead to wrecking their financial stability, regardless of the objective they have in mind. They haven't yet come up with a satisfactory answer, either. The whole plan, or theory, is based only on assumptions, or estimates * * * there are so many unknown quantities involved, all of which is very confusing.

For instance, consider the following points appearing in the testimony of utility company officials before the House Subcommittee on Public Works Appropriations on May 18, 1955, record of which is now public:

On page 694, Mr. McKee of Empire District Electric says: "Pased upon estimates of KAMO of its power requirements for the next 10 years, the member cooperatives of KAMO would receive under the terms of the company's proposal an adequate, dependable, around-the-clock power supply at a net average cost of 7.75 to 8.33 mills per kilowatt-hour. These estimates are based on new rates for the hydroelectric peaking power compiled by SPA with the Federal Power Commission."

Now, let it be pointed out that these rates are based upon new rates for the hydro peaking power. Douglas Wright, SPA Administrator, in his testimony on page 71 stated that this hydro peaking power is worth $17.85 per kilowatt-year demand and 1½ mills per kilowatt-hour for energy. This would mean that each kilowatt per year would be worth $21, assuming 2,100 hours use per year. The new peaking rate with the proposed 25-percent discount makes SPA power sell for $10.58 per kilowatt-year. The question is, what would happen to KAMO's rate, under the proposal, when the SPA peaking power rate is raised somewhere near the level of where it should be, possibly about $18 per kilowatt-year? Surely such an increase would be passed on to KAMO, and then, what would happen to our 7.75 or 8.33 mills per kilowatt-hour rate?

On page 11 of the same House hearings record, Mr. Wilkes of S. W. P. & L. Corp., in connection with another matter stated: "The power produced from rivers in the Southwest will bring a price 3 or 4 times as high as ordinary steam power because it is peaking power which can be stored there in the form of water which is the only way I know of storing electricity." Now Mr. Wilkes seems to think this power is worth considerably more than the Government is charging for it.

At the bottom of page 671 of the same House hearings, Mr. Porter of K. C. P. & L. says: "It is not possible to put an exact value on hydro at any given spot, but for the purpose of this discussion I would say that the value of the kilowatt-hour hydro with 1,800 kilowatt-hours of primary energy, such as SPA offers, would be approximately 13 or 14 mills per kilowatt-hour in the Kansas City area. Under the new rate schedules filed by SPA in January of this year, I believe the energy will be available to N. W. at the reservoir area at the base rate of 7½ mills, so there is a differential of some 6 mills between cost and the value of hydro in an integrated

operation." In other words, Mr. Porter is saying that this power is worth about $25 per kilowatt-year in Kansas City. So all the evidence points up that the SPA peaking power is worth a great deal more than the $10.58 at which it is currently being offered. And it is evident to follow that considerable pressure will be put upon SPA and the Government to sell this peaking power at considerably higher rates than is presently being offered. If so, our cooperative would be in a hazardous position. It could possibly be that this proposed offered rate is bait to get us in the contract.

It is safely assumed that the companies are looking out and ahead for their own interests first. If they can wrangle this deal to embody points that will make them some big, easy money quickly or eventually, call it a subsidy or not, naturally they will do it. On page 695 of the House hearing, it is indicated that the companies want to obtain the SPA facilities in the Springfield, Mo., area for the mere obligation of their maintenance and operation. This, of course, would amount to a large subsidy to the Empire District Electric Co., because the Government has many millions of dollars invested in these facilities.

These are recitations of only a few of the many points and complications, implications, and assumptions, which are dreadfully confusing in trying to work out the suggested experiment of integration contracts between the companies and the cooperatives. There is not much of common ground between us.

Why not eliminate all this uncertainty by returning to the basic SPA-cooperative contracts (as proposed to be modified) which are basically right and workable and have been upheld as strictly valid by the high courts of our land * * * a solid, substantial plan on which our cooperatives were engineered and financed to live, progress, and serve the farm people.

We have no obligation to the electric utility companies; we are not interfering with their operations and expansion. They are going along better than they ever have in their history. If they got tied up with us they might find us an unnecessary or unprofitable burden to carry. Let them run their own business. Let us run our own business, to serve ourselves as we know the job can best be done.

After 2 years wasted sputtering around and experimenting with the proposed company integration contracts theory, we do not see much of any satisfactory results. We do not believe the other parties concerned are anywhere near satisfied on any single point either.

We ask you to give us the reactivation of the SPA contracts under which our cooperatives can live and progress and serve, and make us solvent and secure for the future.

Honorable Senators, it is within your power to do so. It is our fervent prayer and plea that you so act.

STATEMENT OF H. G. TEMPLETON, PRESIDENT OF THE BOARD OF TRUSTEES, WESTERN FARMERS ELECTRIC COOPERATIVE, ANADARKO, OKLA.

Mr. Chairman and gentlemen of the committee, I am H. G. Templeton, president of the board of trustees of Western Farmers Electric Cooperative of Anadarko, Okla. We respectfully request Congress to provide sufficient funds to reactivate our basic contracts with the Government, eliminating the option to purchase and the operating and maintenance clauses from the contract; provide funds to SPA to pay Western Farmers Electric Cooperative for use of its transmission lines for wheeling of power to distribution cooperatives and other preferred customers.

These contracts have been judged valid by our courts, and Congress would provide funds each year to implement these contracts including the year 1953–54. These contracts became inoperative on July 1, 1953, when Congress failed to provide funds for this purpose.

In seeking to find suitable arrangements with commercial power companies to replace these contracts, we hired the services of an outstanding consulting engineer, as well as we being aided by the Department of Interior and the Rural Electrification, but after months of negotiation we do not have any proposals from the power companies which are acceptable.

Our generating and transmission cooperatives in our opinion, must know now where we stand in this matter. We can't afford to operate our business on a month-to-month basis. We appreciate what has been done of course, but we borrowed funds from REA to provide these facilities on the basis of these contracts. We believe the arrangements are fair to all. We respectfully request Congress to settle this matter for all time so that the management of these

cooperatives may adequately plan to keep ahead of our ever-increasing load growth, and thereby be able to supply our members with adequate electric power when needed, and at a price which will afford the most widespread use of it.

STATEMENT OF THE NORTHFORK ELECTRIC COOPERATIVE OF SAYRE, OKLA.

Mr. Chairman and gentlemen of the committee, my name is Cecil I. Neely. I have been the manager of the Northfork Electric Cooperative for over 12 years. In all these years this cooperative has been a member of Western Farmers Electric Cooperative, a generating and transmission Cooperative located at Anadarko, Okla.

I will not attempt to reiterate the historical background of the Western Farmers Electric Cooperative and its contracts with the Southwest Power Administration, as I am sure you gentlemen are fully acquainted with the situation as it exists today, and the reasons.

We firmly believe that if this Senate Committee and the Senate can agree with the report of the Interior Subcommittee of the House Appropriations Committee, the preferential customers will then be able to solve their problems regarding the hydro power developed in the southwestern part of the United States. We believe this is a sensible solution to a very simple problem. That problem is the supplying of the hydro power to its ultimate consumers at the lowest possible cost. If the Southwest Power Administration can purchase the excess steam capacity from the generating and transmission Cooperatives to firm up certain quantities of hydro power, they will most definitely increase the value of their hydro power. If the Southwest Power Administration can lease the additional transmission line capacity from the generating and transmission Cooperatives, it can then supply its power to additional preferential customers. The generating and transmission Cooperatives will profit by them being able to spread the overall generation and transmission costs to a larger volume of kilowatt-hours. The private utility companies in the entire southwest area will also profit by this arrangement. The G. and T. Cooperatives now have lines in areas that could be well utilized by intergration with the utilities in order to provide better voltage regulation, better continuity of service and the advantage of the diversity of the load factors. In many instances it will result in considerable financial savings by eliminating the necessity of the utility companies duplicating our facilities to provide adequate service to their own customers.

It has never been a secret that the whole economic and feasibility studies made in connection with the loans to the generating and transmission Cooperatives, were based on the intergration of these systems with hydro power for peaking purposes.

In our appearance here, we are not only asking the Congress of the United States to provide the funds to reactivate these contracts, but we are pleading that they issue a directive to the Department of Interior and Southwest Power Administration to actively and agressively promote and implement these contracts to the best interest of our Government and the people of the area.

STATEMENT OF THE EAST CENTRAL OKLAHOMA ELECTRIC COOPERATIVE, INC., OF OKMULGEE, OKLA.

Mr. Chairman and gentlemen of the committee, as president, secretary, and manager, respectively, of this REA-financed cooperative, we have been requested by our entire board of trustees to briefly present some facts to your subcommittee.

Our cooperative serves some 6,000 consumers in an 8-county area approximately 45 miles south of Tulsa, Okla. Among our users are over 900 producing oil well consumers as well as some 140 other rural powerloads.

We purchase some 35 percent of our electric power on a 20-year contract basis from Southwestern Power Administration at Tulsa, Okla. Due to the lack of a sufficient appropriation of funds to permit SPA to purchase firming steam power and pay wheeling charges, our SPA power has been seriously curtailed, forcing us to negotiate with the two private power companies in Oklahoma for our power requirements. Such negotiations have proved unsuccessful, our two Oklahoma private power companies having submitted us proposals only on such a basis that will not permit us to serve a large number of our commercial power-

loads and preventing us from further developing our commercial market for power. Without this future commercial powerload, our rates to the farmers in our area must soon be very greatly increased.

The other 65 percent of our electric power is purchased from KAMO Electric Cooperative, Inc., Vinita, Okla., an REA-financed transmission cooperative. The KAMO organization has been negotiating with the southwestern Missouri private power companies for over 18 months, without reaching any workable agreement. KAMO is filing a separate statement with this subcommittee, actively supporting this same SPA-G. and T. contract reactivation.

We wish to aggressively support the recent resolution of the Advisory Committee on Power for the Southwest, of which six-State committee our manager is a member, urging the Congress to reestablish a sufficient revolving or continuing fund for Southwestern Power Administration, for the specific purpose of reactivating the basic contracts between the Federal Government and the several generating and transmission cooperatives and directing the Department of Interior to effectively administer these basic contracts with the following amendments:

1. Eliminate the option to purchase the G. and T. Cooperatives' transmission lines by the Government.

2. Provide that the operation of all the cooperative's facilities be done by the cooperative's personnel instead of by the Southwestern Power Administration.

3. Further, and in addition, the power both purchased and sold by the Southwestern Power Administration be balanced off in dollars and that the difference only owed to or by SPA be paid. This is the basis of the interchange of power between SPA and the two private power companies in Oklahoma at this time. As a matter of fair play, surely the REA financed cooperatives, municipal power and light organizations and other public bodies in Oklahoma, under the preference clause of the 1944 Flood Control Act of this Congress, are entitled to the same consideration as are the two private profitmaking power companies of Oklahoma.

The matter of the legality of the SPA-REA G. and T. Cooperatives' contracts has been the subject of a lawsuit for over 18 months. The United States Circuit Court of Appeals in Washington, D. C., on April 28, 1955, ruled by a 2 to 1 decision that the private power companies have "no standing to sue" the Federal Government and have ordered the case dismissed. The legality of these SPA contracts is now unquestioned. To reactivate these original SPA contracts, as amended, requires only the favorable action of this Congress. The reestablishment of the "revolving" or "continuing" fund will enable SPA to render a full accounting to Congress each year through the Department of Interior.

The reactivation of this basic 1949 contract between SPA and the G. and T. Cooperatives, a valid Governmental contract obligation, will accomplish the following:

1. Provide SPA with 190,000 kilowatts of firm (continuous) usable power for use in "firming" its hydroelectric generating capacity.

2. Allow SPA to sell a large majority of its power in the future at approximately 7.16 mills instead of at "dump" power rates of from 1.75 to 2.25 mills as it has been obliged to do in the past 3 years.

3. Improve SPA's "pay-out" situation to a very great extent by increasing its dollar sales over $7 million and decreasing accordingly its pro rata operating costs.

4. Make 50,000 kilowatts of additional power available to REA financed distribution cooperatives, municipal power and light plants, and other preference customers in Oklahoma, Missouri, Arkansas, Kansas, Louisiana and Texas.

5. Protect United States governmental loans through the Rural Electrification Administration totaling over $380 million, to REA distribution, generating and transmission cooperatives, as planned when the basic contracts were consummated.

6. Provide for a well-integrated power transmission grid in the Southwest involving both private and public power groups.

7. Provide, as originally contemplated, for extensive future load growth of the REA-financed Cooperatives and municipal power and light organizations throughout the Southwest.

We respectfully urge this Subcommittee to reestablish this revolving or continuing fund for SPA so that the amended SPA–G. and T. contracts may be effectively reactivated. Over 900,000 rural people and small commercial power users in the entire Southwest will be greatly benefited by such action on the part of this Congress.

May we have the careful consideration and approval of this subcommittee?

STATEMENT OF BILLIE BRYAN

I am Billie Bryan, manager of the Caddo Electric Cooperative at Binger, Okla., serving 6,000 members in Caddo, Canadian, Custer, Blaine, Washita, Kiowa, Grady, and Comanche Counties.

I bring you greetings from my board of trustees on this 20th year of our existence. Yes, 20 years of progress, 20 years of lightening the burdens of over 5 million farm homes all over this great country.

The Congress of the United States made all this possible. With your foresight, the common man has been able to lift himself out of darkness and drudgery. All the little Marys and Johnnys are able to read by adequate light. Mother no longer carries tons of water a week for household needs. Thanks to the Congress and to the executive branch of our Government. You have done a job for which others try to claim credit.

The concept of the American Government is to assist people to do collectively what they cannot do individually without penalizing any group. This you have done. No one else would do this job except the people themselves.

Today are we to throw all this aside? Are we to say to the common man, "you can't do these things for yourself, you can't buy electricity at a reasonable price. You must pay what others tell you to pay?" Of course not. You gentlemen of the Congress know the issues and how they will affect the rural economy. You know the great use the farm people are making of electricity. You know they need adequate capacity.

Are we going to scrap this program in its 20th year or are we going to continue forward? We know you gentlemen will reinstate the contracts that have been repudiated, so that "the light" may continue to burn in the little farm home—the light the Congress lighted 20 years ago.

STATEMENT OF DOYLE POPE, FARMER AND MEMBER OF THE BOARD OF TRUSTEES OF THE OKLAHOMA ELECTRIC COOPERATIVE AND OF WESTERN FARMERS ELECTRIC COOPERATIVE

Mr. Chairman and gentlemen of the committee, I am Doyle Pope, a farmer living 5 miles southeast of Norman, Okla., a past president of the Oklahoma Statewide Electric Cooperative Association, and at present I am a member of the board of trustees of the Oklahoma Electric Cooperative (a distribution cooperative) and of Western Farmers' Electric Cooperative (a generation and transmission cooperative).

My purpose in appearing before this committee today is to try to explain to you gentlemen the position we farmers in the Southwest area find ourselves now since the basic contracts we signed with our Government in 1949 have been made inoperative as of July 1953.

1. *The need of an abundance of dependable low-cost power.*—We must purchase power at a rate so that we can deliver it to our members at a price they can afford to pay and still leave a margin sufficient for operations and to pay back to the Government with interest the money we have borrowed to construct our system.

2. *Feasibility of our system and Western Farmers' Electric Cooperative.*—The feasibility of the loans made to electric cooperatives in the Southwest area were based on the rates which we could obtain through sale and exchange of power in accordance with the basic contracts we have made with our Government acting through the Southwest Power Administration. These contracts have been sustained twice by the Federal courts. They were sound at the time they were made and are still sound today. In July of 1953 when these contracts were made inoperative by the Government we were told by the Administrator of REA to go back and see if we could not negotiate contracts with our local commercial power companies that would be equal to or near the same as the ones we had with the Government through SPA. For almost 2 years we have held meetings with the commercial power companies in Missouri and Oklahoma, and the best we have been able to get to date would cost the 11 cooperatives in western Oklahoma approximately $950,000 per year more for power than it would through the exchange agreement with the basic contracts with the Government. This contract added to the other operating costs of our system would mean that we would be forced to increase the rates to our members in order to be able to make our payments of principal and interest to the Government as they come due.

3. *Loans.*—We made these loans with REA in good faith and expect to pay them back with interest as they come due. However, as stated above, the

feasibility of these loans was based on rates obtainalbe through the exchange and sale of power through the basic contracts we had previously made with our Government acting through the Southwest Power Administration. We made these contracts in good faith and had faith in our Government that they would carry out their portion of the contracts also.

4. *Reactivation of contracts.*—Reactivation of these contracts would be beneficial to the Government, because they could market their hydropower to their preferred customers as intended in the Flood Control Act of 1944 to a much greater advantage and be able to return more money to the Federal Treasury, because they would have more power to sell to their customers by using the full capacity of the steam plants around the clock and supplementing with hydropower for peaking purposes. It would also be an advantage to the direct customers of SPA (municipalities, cooperatives, and other direct customers), because it would give the SPA more firm power for sale. Many of the municipalities and cooperatives which are now direct customers of SPA are badly in need of more power, especially during the summer months just ahead. It would also be an advantage to the G. and T. cooperatives in the Southwest area by the same token. They could utilize to the fullest extent the potential capacity of their steam plant around the clock and purchase back what power was needed for peaking purposes, thus eliminating a great deal of capital investment in more equipment which they would only need for 3 or 4 hours out of the 24-hour day. By this exchange of power it would mean the retaining of lower rates for the ultimate consumer and the small municipalities and rural areas alike.

In closing, I urge you to consider all the facts and methods of marketing electric power and then make it possible to restore these contracts, thereby helping the Government by retaining more electrical revenue to be turned back to the Federal Treasury and by restoring faith with the people in the Southwest area. It will also help to retain a lower and reasonable rate for electric power and put the electric distribution cooperatives back in a position whereby we can meet our obligations to the Government as they become due.

STATEMENT OF E. E. KARNS, GENERAL MANAGER OF WESTERN FARMERS ELECTRIC COOPERATIVE

My purpose in appearing before this committee is to request that the report of the Public Works Committee of the House of Representatives and the resultant approval of the House of Representatives on June 15 be carefully considered and approved by this committee. It is imperative that this Congress complete its favorable action on our request before the end of this month so that steps can be taken to reactivate the several contracts between the G. and T. cooperatives in the Southwest area with the Government. These are the contracts that were in full force and effect up to the 1st of July 1953.

Basically, Western Farmers and the other G. and T. cooperatives involved were asking for five things, namely:

1. To eliminate the option to purchase by the Government,
2. To eliminate the operation and maintenance of the transmission system by the Government,
3. For Congress to establish a revolving fund so that the Southwestern Power Administration could carry out its responsibilities under the terms of the contracts and the people affected would not have to get in the political arena every year asking action by the Congress,
4. For SPA to settle transactions with the G. and T. cooperatives on the basis of net balances, and
5. For Congress to direct the Department of the Interior to act forthwith in reactivating the contracts and the carrying out thereof.

Let us discuss each point briefly

1. The G. and T. cooperatives did not want the option to purchase by the Government in the contracts in the first place. We do not believe that Congress did either, but the Southwestern Power Administration insisted upon it.

2. In regard to the operation and maintenance of the transmission system, the G. and T. cooperatives have equipped themselves with trucks, tools, materials, and competent manpower and are performing this function satisfactorily. Consequently, there is no need for the Government to engage in this activity.

3. We have been advised that the House of Representatives voted the sum of $6 million for the continuing fund to be used by SPA, $5,550,000 of which is to do

business with the G. and T. cooperatives. Although this is not as good as a revolving fund, we accept this action at this time.

4. SPA and the generation and transmission cooperatives should be permitted to settle on net balances at the end of the month on power purchases by SPA from the G. and T. cooperatives and for power sales by SPA to the G. and T. cooperatives. In so doing, only a small amount of money will be required by SPA, if any, to do business. We understand that SPA settles with the Oklahoma companies on this basis.

5. We believe that it is necessary for Congress to direct with appropriate language the Department of the Interior to reactivate the contracts promptly and to discharge their functions in a businesslike manner. Last year, Congress appropriated funds to purchase power from the G. and T.'s from July 1, 1954, through February 28, 1955. The Department of the Interior required 5 separate contracts to cover this 8-month period. Altogether in the 12-month period ending this month, we have been required to execute 7 separate contracts with SPA.

We feel that we have the best interests of our Government and its affected citizens at heart in making the foregoing request. The more important reasons will be analyzed briefly:

Representatives of the G. and T. cooperatives in the Southwest area, State associations of cooperatives and of individual cooperatives have spent thousands of man-hours, thousands of dollars, and traveled thousands of miles attending meetings, etc., during the past 2 years in an effort to find suitable substitute arrangements with the commercial power companies in lieu of the contracts with the G. and T. cooperatives held with their Government.

On April 12, 1955, the Advisory Committee on Power for the Southwest in a meeting in Tulsa, Okla., after due consideration of all the facts, passed a resolution supporting the requests of the several G. and T. cooperatives for the reactivation of their basic contracts with the Government amended as set forth above. This committee represents the G. and T. cooperatives, electric distribution cooperatives and municipalities in Missouri, Kansas, Arkansas, Oklahoma, Texas, and Louisiana, so the representatives of several hundred thousands of electric consumers in this vast section of the United States support our request.

The Committee took the above-described action because:

1. The commercial power companies did not offer any of the G. and T. cooperatives suitable contractual arrangements. They apparently felt that they had the G. and T. cooperatives over a barrel and spent their time to get us to accept contracts that would force our rates up to our member cooperatives to the extent that disaster would probably follow. The people believe with considerable foundation, that if the rates go up to the G. and T. cooperatives' members, then the commercial companies will raise their rates to cooperatives and municipalities outside the area of the G. and T.'s.

2. Responsible officials of the Administration were urging the G. and T. cooperatives to take a substantial block of hydropower and use it in negotiations with the commercial power companies turning it over to the companies for a profit in order to seek lower rates for the immediate members of the G. and T.'s. This action would have made the commercial power companies positive preference customers for hydropower and furthermore created a situation that no representative of any G. and T. cooperative could explain to anyone outside of the G. and T.'s.

3. The Department of Interior in its anxiety to get us to integrate with the commercial power companies was recommending to the Federal Power Commission a new rate for hydropower for selling it primarily as peaking power at a very low rate. The people know that if this hydropower is sold for peaking power, that the guy without a sizable generator in his hip pocket can no longer participate and purchase hydropower.

4. The people studied the fact that SPA has access in the dams to a substantial amount of capacity (kilowatt) but is limited on energy (kilowatt-hour). They know that if the basic contracts are reactivated, SPA will gain the output of 90,000 kilowatts of thermal capacity and nearly 700,000 kilowatt-hours which enable SPA to sell more of its hydro capacity on a firm basis to its customers.

The people reviewed the investments made. The G. and T.'s have borrowed and spent approximately $70 million to build their respective systems after they negotiated contracts with their Government. Another branch of the Government, REA, also believed the contracts to be sound or they would not have loaned the money in the first place.

The contracts were tested in the courts and at this writing have been sustained twice. Furthermore, the member cooperatives of the G. and T. cooperatives

have invested in the neighborhood of $300 million on rural distribution lines with the comfortable feeling that they had worked out contractual arrangements with the Government through their G. and T. cooperatives to provide a low wholesale rate so that they could do business. REA believed this too or the money would not have been lent because without the low wholesale rate, feasibility behind the respective loans could not have been established in most cases.

In addition, the commercial power companies cut thier wholesale rates to the cooperatives outside the G. and T. areas so these distribution cooperatives likewise borrowed large sums of money on the basis of low wholesale rates. REA believed that these rates would stand the test because loans were made on a 35-year basis to each and every cooperative. All of the cooperatives in this area for all practical purposes, have served every man the draft board or tax collector could find. They had faith in their Government to help them do collectively what none of them could do individually which is one of the prime functions of our Government.

The people after considering all the foregoing facts and others that time does not permit mentioning, came to the conclusion that they wanted their Government to put its business on a sound business basis so that they, in turn, could operate their business on a sound business basis and repay their loans on time, develop their rural areas with low-cost power and help to build and strengthen the economy of the United States.

We believe this committee would like to know briefly how Western Farmers has made out in its negotiations with the commercial power companies in Oklahoma. After all the effort, the best offer of the two companies can be analysed briefly as follows:

(*a*) Their best offer would cost the farmers, commercial users and others served by the member cooperatives of Western Farmers Electric Cooperative approximately $1 million per year more for electric power than would have been the case if the basic contracts heretofore discussed had remained in full force and effect.

(*b*) These proposed integration contracts would cost the farmers approximately $775,000 per year more than would be the case under the new proposed rates of the Southwestern Power Administration during the first 5-year period.

(*c*) The proposed contracts would cost the farmers and others approximately $600,000 more than would be the case under the new proposed rates of SPA after the first 5-year period.

(*d*) The power companies want to put our Woodward dual fuel plant strictly on a standby basis and desire to do practically the same thing with our Anadarko steam plant. They would tell us when to run the plants and how much and expect us to keep competent crews which cannot be done when power plants are cold most of the time.

In conclusion, we ask that Congress approve our request so that the cooperatives and the Government will be in position to operate on a sound business basis from year to year. Senators, Congressmen, and the farmers have all been proud of the REA program and the development of hydroelectric power. Let us keep faith with one another so that we may all enjoy mutual success.

STATEMENT OF FLOYD GIBSON, GENERAL MANAGER, OKLAHOMA STATEWIDE RURAL ELECTRIC ASSOCIATION

Mr. Chairman and members of the committee, my name is Floyd Gibson. I live in Oklahoma City, Okla., and I am general manager of the Oklahoma Statewide Electric Cooperative. This statement is in accordance with official action by resolution of the OSEC.

I am submitting this statement in behalf of the reactivation of the SPA-G. and T. contracts as passed by the House of Representatives. We believe approval by the Senate would be in the best interest of the Federal Government and the people of Oklahoma.

Mr. Chairman, we thought we had the farm power problem pretty well solved in Oklahoma when the Government established SPA in 1943 and Western Farmers Electric Cooperative got started, and these two joined hands in a partnership arrangement known as the contract we desire to be reactivated. As you know, this arrangement was torn up by its roots in great haste in 1953. We do not know why, but we believe it was a tragic mistake which should be corrected immediately.

We have been wallowing around in a sea of confusion during the past 2 years. We have followed what we thought was the will of the Congress in trying to sub-

stitute the private utility companies as a partner in the place of the Government. Two futile years have been spent in these efforts to work out a substitute contract with these companies. We believe further efforts in this direction are futile. The answer to our problem is to restore the basic contracts between SPA and the G. and T.'s.

We do not believe reactivating these contracts offers any insurmountable obstacles. The facilities are all built and working properly. They are interconnected with SPA, and the contracts can be reactivated on a moment's notice without the expenditure of a single dollar for additional facilities.

We are very hopeful, Mr. Chairman, that the Government will put on an aggressive program to load up these G. and T. systems with preference customer loads so as to put SPA in a good financial position to avoid any rate increases. We trust that losses incurred, if any, for a few years at the beginning of a 40-year contract, when the contracts over the whole period appear to be profitable to the Government, will not require any changes in rates. We believe it highly desirable for SPA rates to be stabilized at their present rate "A" level for a period of 5 years to enable SPA to rapidly develop its market and load up the G. and T. systems.

STATEMENT OF NORTHWESTERN ELECTRIC COOPERATIVE, INC., WOODWARD, OKLA.

Mr. Chairman and gentlemen of the committee, I am Jess M. Hedges, president of the board of Northwestern Electric Cooperative, Inc., Woodward, Okla.

On behalf of the board of trustees of the rural electric cooperative which I represent, I wish to file this statement.

Our cooperative is very disappointed over the refusal of the Department of the Interior to recognize the contract which Western Farmers Electric Cooperative signed a few years ago with SPA in regard to sale and purchase of electric power. It was agreed by everyone concerned at the time the contracts were made, that they would benefit both the electric cooperatives and the Government, and we feel that this fact has never been challenged by the Department of the Interior. We agree that the option to purchase by the Government should be eliminated, and the provision of a wheeling charge to be paid by the Government to the cooperative for the operation and maintenance of the transmission system by the generating cooperative should be included in, and made a part of the contracts.

It has already cost our cooperative and all other rural cooperatives who are members of the generating cooperatives affected, several thousand dollars, because these contracts have not been honored. Responsible engineering firms agree that it would be a fine thing for the hydroelectric system of SPA to be interconnected with the cooperative steam plants in order that the most economical plan for the generating of electricity for rural electric cooperatives could be carried out.

The rural electric cooperative members in our part of the country have been hard hit by greatly reduced farm income. Now is a bad time to have increases in our wholesale power costs.

Our board of trustees and members cannot help but feel hurt that our Government has seen fit to ignore contracts which were entered into in good faith by organizations representing several thousand loyal citizens, and we feel that they should make an honest effort to reinstate these contracts with the deletions and additions mentioned above.

STATEMENT OF THE RURAL ELECTRIC COOPERATIVE, INC., OF LINDSAY, OKLA.

Mr. Chairman and gentlemen of the committee, we wish to stress the fact to this committee that if the revolving fund and the reactivation of the existing contracts with SPA are not allowed, Western Farmers Electric Cooperative and its 11 member cooperatives will be faced with financial ruin. It will only be a matter of time until we will be forced out of business.

Western Farmers and its 11 member cooperatives have borrowed millions of dollars from REA and have invested it in the construction of facilities to serve the farms of this area with electricity, based upon the good faith of our Government in carrying out their part in the existing contracts with SPA, with the exception of the lease-operation clause in the contract.

The activation of these contracts and the revolving fund for SPA would permit SPA to purchase the G. and T. cooperative power and sell it, with a resulting

increase in the power available to cooperatives and municipalities, providing a market for off-peak steam power of the G. and T. cooperatives and would permit SPA to more adequately meet its obligations for reimbursements to the Government on its hydroelectric projects and at the same time satisfy demands made upon it for additional power to meet the ever-growing loads.

Gentlemen, we are not asking for a handout, just asking that a contract executed in good faith with our Government be carried out. A contract which will permit the cooperatives to continue meeting their obligations to the Government and will be self-sustaining by SPA.

With the very existence of our cooperatives depending upon you, we urge you to allow the proper funds in order for the contracts to be activated.

STATEMENT OF T. H. KETELS, TRUSTEE OF WESTERN FARMERS ELECTRIC COOPERATIVE

Mr. Chairman and gentlemen of the committee, I am T. H. Ketels, a member of the board of trustees of Western Farmers Electric Cooperative at Anadarko, Okla., and I am also president of the board of trustees of the Cotton Electric Cooperative of Walters, Okla., the latter cooperative being a distribution cooperative, serving 7,800 farm families in Cotton, Comanche, Stephens, Jefferson, Tillman, Caddo, and Grady Counties in Oklahoma.

I appear before this honorable committee to urge you gentlemen to make adequate appropriations to the Southwest Power Administration so as to permit the SPA to honor and fulfill its contractual obligations with Western Farmers Electric Cooperative and other G. and T. cooperatives in the Southwestern area. It is my earnest opinion that in making this request, we are not only within our rights under the Oklahoma contracts, but that we are also morally entitled to this appropriation.

The Western Farmers Electric Cooperative is now serving 11 member cooperatives, with most of their electrical requirements, and Western Farmers Electric Cooperative has borrowed considerable sums from the Government in order to construct generation facilities and transmission lines, which funds will have to be repaid to the Government, with interest. When these funds were borrowed from the Government, we believed that we would be able to make repayment because we were relving upon the contracts we had with SPA for exchange of power. We would furnish SPA with firm power so that it could serve its many customers, and in return SPA would furnish us with peaking power, to the mutual advantage of both parties. Under these contracts, we could then serve the member cooperatives, and they in turn, could serve their individual farmer members with adequate amounts of electric energy, at prices the farmers could afford to pay. We did not dream that the time would ever come when our Government would renege on these contracts, and we do not now believe that the Congress of the United States will be a party to permitting the Government to ignore its contracts with us. This contract that I refer to, was fairly entered into, in good faith, and we stand ready to fulfill and honor our part of the contract, and we believe that we are entitled to fulfillment of same by the Government. All parties now agree that the contract should be modified to eliminate the lease-purchase option as regards the transmission lines, but otherwise, these contracts, which have been upheld by the courts, should be honored by all parties.

As to the moral aspects of our requests, we submit that the hydrogenerating facilities of the Government belong to all of the people and we find it impossible to believe that the utilities should be given the right to purchase the hydro output of these plants to the exclusion of the nonprofit cooperatives and municipalities.

If you gentlemen would make available to SPA adequate appropriations to permit the fulfillment of these contracts, I respectfully submit that the Government and the farmers will both profit and the Government will be repaid in full, with interest, all funds heretofore borrowed by Western Farmers Electric Cooperative. Otherwise there is some doubt that we can repay our obligations without first raising wholesale power rates to the point that the distribution cooperatives and farmers will not be able to meet the same.

STATEMENT OF THE OKLAHOMA ELECTRIC COOPERATIVE OF NORMAN, OKLA.

Mr. Chairman and gentlemen of the committee, in February of 1941 this cooperative joined with 10 other cooperatives in western Oklahoma for the purpose of securing for ourselves an abundant and dependable source of electric power at a rate which our farm members could afford to pay. After extensive study and planning a loan was secured from the REA in July of 1941 to construct a plant and transmission lines. Work was started, but as you know the war broke out and the Defense Plant Corporation took over and reimbursed for the equipment which we were having manufactured.

After the close of the war we started working again, and in December of 1949 we signed a contract with SPA for the sale and exchange of electric power. This carried out by action the intent of the provisions of the Flood Control Act of 1944. In the spring of 1950 we energized a dual fuel plant at Woodward, Okla., with an installed capacity of 4,400 kilowatts.

The construction of a 30,000-kilowatt steam plant was started at Anadarko and also construction of approximately 900 miles of transmission lines to connect to various load centers of the member cooperatives. This plant was completed and put in operation in August of 1953 with a capacity of 34,000 kilowatts. Approximately 775 miles of transmission line have been completed and put in operation. The feasibility as well as the construction and planning of this plant and distribution system were predicated upon the joint operations in connection with the basic contracts signed with SPA in 1949. At that time SPA was operating with a revolving fund which has since been abolished and is now operating by direct appropriations. This contract was made inoperative in July of 1953 just as we were completing construction of our plant and distribution system. Without this contract for exchange of power SPA is forced to sell its hydro power around the clock to supply the varying demands of its preferred customers, while great quantities of the potential steam power are going to waste at Anadarko during the offpeak hours. By the reactivation of this contract SPA could exchange power with the generation and transmission cooperatives in its area and use its hydro power for peaking purposes which would give it much more power for municipalities, cooperatives and other preferred customers, and by exchanging kilowatt-hours rather than the cash sale and purchase of kilowatt-hours SPA would only need a small revolving fund for operation.

Western Farmers' Electric Cooperative has borrowed from the Government through the REA approximately $16 million with which to construct the abovementioned plant and distribution system which we are now operating, but which at times is only operating at a small portion of its capacity.

If it could operate at more nearly full capacity around the clock with SPA taking the excess steam power at nights and other offpeak hours and delivering it to its customers and then in return furnish power during the peaking hours for the generation and transmission cooperatives, the plant itself would operate more efficiently and without loss. It would be of great benefit to the customers of SPA as well as the member cooperatives of the generation and transmission cooperatives, and also return more revenue to the Federal Treasury, and furnish additional power which is needed by many of the municipalities and other direct consumers of SPA. (You cannot generate power by steam and store it up to be be used later, but you can store the water in the lakes to a large degree and use it when the electric power is needed.)

In conclusion, we wish to make it clear to the committee that we are not proposing any financial burden on the Government. For by reactivation of these contracts the SPA would have more power to sell and more revenue to return to the Federal Treasury.

STATEMENT OF A. D. WRIGHT, SPECIAL COMMITTEE ON POWER FOR ARKANSAS STATE ELECTRIC COOPERATIVE, INC.

My name is A. D. Wright of Mena, Ark., I am a member of a special committee on power of the Arkansas State Electric Cooperative, Inc., a board member of said cooperative and manager of the Rich Mountain Electric Cooperative.

I am appearing before this committee in the interest of, and representing, the 125,000 farm families in Arkansas who purchase their electric power from the 18 Arkansas rural electric cooperatives.

The 1956 public works appropriations bill, which provides funds for the Southwest Power Administration and restores the continuing fund for integration with farmer-owned steam generating plants is of vital interest to the farmers of our

State. As over the Nation, a cheap and dependable supply of electric power is becoming increasingly important to the successful farm operations. Unless we have the possibility of receiving power from another supply, we are at the complete mercy of the commercial power companies for the service we render our farmers and the price that we will have to pay for power wholesale.

The continuing fund is especially important to our future well being. The continuing fund enables the Southwest Power Administration to integrate with the rural electric cooperatives as well as with the commercial power companies, which it is now doing.

We feel that because of the denial of the SPA the right to integrate with generating plants, the Government, the taxpayers and the rural electric cooperatives are being penalized and the commercial power companies, in effect, are being subsidized.

From our very recent experience with the commercial power companies in the State of Arkansas, the only possibility of electric cooperatives being able to intelligently plan for the future, especially in regard to the cost of wholesale power, is absolutely dependent upon our having our own power supply or being able to integrate with the Southwest Power Administration.

We therefore urge the committee to give the 1956 public works appropriations bill favorable recommendation.

Attached is a copy of a resolution that has been passed by the Arkansas State Electric Cooperative, Inc., the association of Arkansas' 18 rural electric cooperatives.

Whereas the Arkansas State Electric Cooperative Corp. duly represented by all the electric co-ops of Arkansas, and which said co-op represents 125,000 farm families, meeting in full session on Wednesday, May 12, 1955; and

Whereas the said State co-op recognizes the need for low cost electricity in the State of Arkansas as well as in the surrounding States; and

Whereas Arkansas is a very interested link of the southwest power group comprising Arkansas, Missouri, Oklahoma, Louisiana, and Texas and a part of Kansas, and

Whereas the rising power costs in this area due largely to the Department of Interior's reversal of power policy, and to Congress failure to appropriate a continuing fund for SPA to operate on; and

Whereas these two conditions, coupled with the United States Government's repudiation of its most solemn obligation and contract with the Northwest and Central of Missouri, and Western Farmers of Oklahoma group, has brought about a monopoly of electric power for the so-called private power companies, and has bypassed the original intent of the Flood Control Act, delegating the use and sale of this power, first to Army and Navy or Government needs, second to cooperatives and municipalities, and third to private power companies and others if any left, and

Whereas these factors have created a very unhealthy situation with respect to the financial status of some electric cooperatives: Now, therefore, be it

Resolved, That this group of Arkansas cooperatives representing 125,000 farm families does unanimously endorse and support the return to the continuing or revolving fund type of operation by SPA, or the authorization by Congress for SPA to use its funds collected from the sale of power to buy and sell power as it may deem necessary to uphold the original intent of Congress, and help hold the line for low cost power for the Southwest Area; be it further

Resolved, That this group believes that the Congress should force the Interior Department to line up to the Government's contractual obligation for the sale of the SPA power as was originally intended; and be it further

Resolved, That copies of this resolution be forwarded to all the United States Senators and United States Congressmen in the SPA area asking their support and assistance in carrying out the foregoing.

STATEMENT OF F. A. MARTZ, MANAGER, N. W. ELECTRIC POWER COOPERATIVE, INC., CAMERON, MO.

Mr. Chairman and gentlemen of the committee, My name is F. A. Martz. I am manager of N. W. Electric Power Cooperative, Inc. (hereafter referred to as "N. W."), Cameron, Mo. N. W. is a rural electric cooperative organized under the laws of the State of Missouri by eight REA-financed rural electric cooperatives of northwest Missouri, to furnish power for their farm members in that area.

N. W., through loans received from the Rural Electrification Administration in January 1950, constructed a 40,000-kilowatt steam generating plant, approximately 600 miles of 69-kilovolt transmission line, and approximately 300 miles of 161-kilovolt transmission line, resulting in a total investment of approximately $24 million. The REA loan was made after N. W. had entered into a contract with the Southwestern Power Administration (hereafter referred to as "SPA") for the sale and delivery of power and for the construction and lease of certain transmission facilities which represented a major portion of N. W.'s total investments. By the terms of these contracts, N. W. agreed to construct certain transmission facilities and to lease the same to SPA and to sell to SPA all of the power generated by N. W. at its powerplant and in turn to purchase from SPA all of its power requirements to serve its member cooperatives. At that time, there was in existence a continuing fund which enabled SPA to carry out such contractual arrangements. In reliance upon assurances of the Government (through SPA), N. W. completed its facilities and complied in full with all parts of its contract obligations. Subsequently, the Congress repealed the continuing fund. Subsequently, the Congress failed to provide funds to carry out the contracts existing between N. W. and the Government. In face of a favorable court decision (United States District Court for the District of Columbia) upholding the validity of these governmental contracts, the Congress and the present administration, after refusal to recognize the obligations of the Government to N. W., directed that N. W. attempt to work out an integration agreement with private power companies in the area, which should result in N. W. receiving substantially the same economies as afforded under the Government contracts. In response to this congressional and governmental mandate, N. W. immediately proceeded in its attempt to work out integration arrangements with utility companies in the area. Representatives of all generation and transmission cooperatives in the area including N. W. and representatives from the private utility companies from Missouri and Oklahoma met initially October 1, 1953. As a result of this joint meeting it was the unanimous decision of all the generation and transmission cooperatives and the utility companies that negotiations thereafter should be continued at the local level in the belief that most progress could be made in that way with frequent regional meetings in an effort to coordinate the proposed integration.

Between October 1, 1953 and January 1954, N. W. and the Kansas City Power & Light Co. (hereafter referred to as "K. C. P. & L.") arrived at a basic understanding of the nature of the arrangements to be worked out for the integration of their systems. It was recognized by both K. C. P. & L. and N. W. that no agreement between N. W. and K. C. P. & L. could be consummated until a satisfactory contract between N. W., the Department of the Interior, and SPA, could be worked out, embodying the amounts of hydroelectric power that could be purchased, the price and other conditions of the purchase. Negotiations were started immediately with SPA and the Department of the Interior to accomplish such end.

On January 29, 1954, the Department of the Interior in a letter to the President of N. W. made a commitment to the cooperatives for a block of hydroelectric power and fixed the rate therefor. Then began a long and continued series of negotiations in an effort to reach an agreeable contract for the purchase by N. W. of hydroelectric power from the Government. During the course of these negotiations the Department of the Interior made two major decisions that have greatly affected the problems involved in working out contractual arrangements between N. W. and K. C. P. & L. These decisions are: (1) Due to the drought conditions in the area the amount of hydroelectric power the Government had has been greatly reduced. (2) Made a new allocated cost study of the Government facilities that has resulted in increasing rates of hydroelectric power. However, negotiations continued and culminated in a tentative proposal for the sale of hydroelectric power on or about March 22, 1955. The final draft of said tentative proposal by the Department of Interior was received by N. W. for review by its board of directors on Thursday, May 12, 1955. Said tentative proposal by the Department of Interior is conditioned upon a separate contract between N. W. and K. C. P. & L. The terms of said contemplated contract between N. W. and K. C. P. & L., have not been agreed to by the parties. In other words, in order to work out a satisfactory agreement between N. W. and K. C. P. & L. two separate contracts have to be completed. One contract will be between N. W. and the Government, which will provide for the purchase of hydroelectric power, under certain terms and conditions; and another contract will be between N. W. and K. C. P. & L. for the purchase and sale of power and energy, under certain

terms and conditions. Each contract being dependent on the other. N. W., although it has worked diligently in an effort to secure integration arrangements between the Department of the Interior, SPA and K. C. P. & L., does not at this time have a contract with K. C. P. & L. which would enable it to carry out the mandate heretofore requested.

Immediately following the final arrangements with the Department of the Interior covering the proposed N. W.-SPA hydro agreements about March 22, 1955, N. W. and K. C. P. & L. started to work out a cost analysis of the cost involved in an integration agreement. One of the major conditions to be provided for in the integration agreement would provide for payments by K. C. P. & L. to N. W. for the use of certain portions of N. W.'s 161 kilovolt transmission system, the output of the 40,000-kilowatt steam generating plant, plus the purchase from N. W. of a large block of hydro peaking power, that N. W. would purchase from SPA under the N. W. hydro contract. This payment to N. W. would have to be large enough to cover the entire cost of operation, maintenance, replacement and debt service on these facilities. The value of the N. W. facilities covered in the negotiations with the K. C. P. & L. total $15,508,000. The cost analysis clearly indicates that the cost of power from the N. W. generating plant is more than the cost of power from K. C. P. & L.'s larger and more efficient units. So that the N. W. generating plant could only be used economically by K. C. P. & L. as a peaking plant. Generally speaking, this would mean that the N. W. steam plant would only be operated for short periods each day, 5 days a week. To operate a steam plant such as the cooperative has in this manner would not be practical nor economical and would be very harmful to the plant equipment, especially the boilers and turbines. N. W. could not accept this condition of operation. This means that the cooperative steam plant is of little value to the company. Therefore, K. C. P. & L. has to assign greater values to the transmission facilities. This is also the principal reason a large block of hydro peaking power must be purchased by N. W. to sell to K. C. P. & L. This shows that the major benefit accrusing to K. C. P. & L. through an integration with the cooperative would be derived from the use of the 161 kilovolt transmission facilities and the use of hydro peaking power in their electric system.

The failure of the last Congress (83d) to provide funds to implement existing governmental contracts with N. W. seems to have been predicated upon three congressionally stated objections: (1) The outcome of a pending lawsuit instituted by 10 private utility companies in the District of Columbia. (2) Certain congressional objections stemming from the right of the Government under the lease option contracts to operate, maintain and purchase the leased facilities of the cooperatives at the expiration of the contract period. (3) Representation by private utility companies that they could by integration with the cooperatives provide as good an arrangement as the cooperatives had under their Government contracts, and this would eliminate the necessity for further congressional appropriations.

The following answers can now be made to all three of these objections of the last Congress to the N. W.-SPA lease contracts. With respect to the first objection: (1) The United States district court decided the private utility company litigation adverse to the interests of the private utility companies, upon the merits of the suit, and upheld the validity of the contracts. Upon appeal by the private utility companies to the U. S. Circuit Court of Appeals, a decision was handed down April 28, 1955, which held that the utility companies were without standing to institute such a suit. These decisions result in the courts upholding the validity of the contracts, and they now remain outstanding and binding obligations of the United States Government, subject only to congressional appropriations.

With respect to the second congressional objection (2) N. W. proposes to amend its present contracts covering the lease operation and purchase of certain of its facilities so as to remove this objection.

With respect to the third congressional objection (3) the Administrator for SPA has just recently testified in hearings before the subcommittee of the Committee on Appropriations, House of Representatives, 84th Congress, 1st session, that integration of the cooperatives with the Government will deliver power to the cooperatives at a cost of between 6½ and 7 mills. The cost analysis as worked out by K. C. P. & L. and N. W. shows that if N. W. integrates with K. C. P. & L., the power cost to N. W. will be much higher.

As pointed out in this statement, if N. W. were to work out an integration agreement with K. C. P. & L., as directed by the 83d Congress, it would require the purchase by N. W. of a large block of hydro peaking power from the Govern-

ment under the N. W.-SPA hydro contract, and the sale of this large block of hydro peaking power to K. C. P. & L. for use in K. C. P. & L. electric system. This arrangement is strongly objected to by other preference customers on the ground that it is illegal, is in violation of the provisions of the Flood Control Act of 1944, and takes power that is needed by other preference customers of the Government. Does Congress approve of this arrangement?

We would like to point out to the committee that not all of the G. and T.'s SPA contracts provide for the same cost of power delivered to the points of usage. Therefore, N. W. respectfully requests that when the SPA power lease contracts are restored, that the N. W.-SPA power lease contracts should be amended so that N. W. power costs under the amended contracts shall be the same at the points of delivery at the distribution cooperative load centers, as the power costs to the other G. and T. cooperatives. All of the other G. and T. cooperatives are fully in agreement with this request of N. W., and we respectfully request the committee to instruct the Department of the Interior to so amend the N. W. contract.

This arrangement should make no difference to the Department of the Interior since the same amout of money will be received by the Government for its power. It merely means that there will be a slight change in the amounts paid by the individual cooperatives. In other words, it will result in the same treatment for all of the cooperatives.

In all of the electric companies testimony to date they have always maintained that if the Government (SPA)-cooperative contracts were reactivated and placed in operation, it would mean that the Government, through the contracts that the Government executed with the cooperatives, would be paying a subsidy to the cooperatives for the use of the cooperatives facilities. The cooperatives believe that the electric companies are entirely wrong in their statements. Of course, one should have clearly in mind what is meant by a subsidy. If you enter into a contract with a person for the use of certain facilities for a certain sum of money based on the worth of the facilities to you, and you are not able to utilize fully those facilities at first to their fullest extent and you suffer a loss, does that mean that the person who is leasing those facilities to you is being paid a subsidy? Definitely not. A subsidy would exist only if the Government were paying the cooperatives more for the facilities than the facilities cost the cooperative.

We believe that the Government (SPA) knowing what the cooperatives facilities would cost the Government (SPA), the use the Government (SPA) could make of them, the cost of the facilities to the cooperatives, and the fact that the Government (SPA) and not the cooperatives set the price to be paid the cooperatives for the use of their facilities, rules out the companies subsidy charge.

Webster says that the word "subsidy" often carries a derogatory implication.

By the unanimous decision of the board of directors of N. W. Electric Power Cooperative, Inc., at a special meeting held at Cameron, Mo., Friday, May 13, the board directed that the above report be submitted to this committee. They further urge that the N. W.-SPA power lease contracts be restored to full force and effect and that this contract be amended as requested above.

DATE OF IMPLEMENTATION OF CONTRACTS

Mr. BLALOCK. Mr. Chairman, last week when the executives of the Department of Interior appeared before you, one of the problems that came up was the matter of putting these contracts into effect. That is, how long it would take, and whether the contracts could go into effect immediately upon passage of this legislation, and of course, we are hoping that the Senate will not change this bill in any respect, but will see fit to grant to us the same that the House did.

The language of the House report we thought was perfectly clear, that the House committee intended for these contracts to be put into effect immediately, and then we would proceed to work out the contract amendments and make those amendments retroactive to the beginning of the fiscal year.

Mr. Truman Green is here, the manager of the Central Electric Power Cooperative, and I would like to call upon Mr. Green, who was

the manager at the time these contracts were negotiated, is thoroughly familiar with them, and I think he can give some help to the committee with respect to this matter.

CENTRAL ELECTRIC POWER COOPERATIVE

STATEMENT OF TRUMAN GREEN, MANAGER

PREPARED STATEMENT

Chairman HAYDEN. Mr. Green, we would be glad to hear from you. (The prepared statement follows:)

STATEMENT OF TRUMAN GREEN, MANAGER CENTRAL ELECTRIC POWER COOPERATIVE, JEFFERSON CITY, MO.

Mr. Chairman and gentlemen of the committee, we ask that the Senate concur and agree with the House appropriations bill on the Southwestern Power Administration because this bill will authorize SPA to activate its contracts with the generation and transmission cooperatives.

Immediately after passing the bill, as passed by the House, the contracts will be effective. The electric systems of SPA and the G. and T. cooperatives are now completely interconnected; they are now operating in perfect harmony, and no further cost or expense is required to start these contracts operating.

Activation of these contracts between SPA and the G. and T. cooperatives will automatically solve the financial difficulties of the cooperatives and make them solvent for the term of the contracts.

You will notice that in the House hearings we asked that the contracts be amended to allow the cooperatives to operate the transmission lines instead of SPA. This is because:

1. The cooperatives now have competent employees and maintenance equipment and have been operating their systems for over a year.
2. Cooperative operation of lines will save SPA the cost and trouble of employing a large force for this purpose.
3. Cost to SPA will be less because the cooperatives have close local supervision and can draw on their member cooperatives for emergency help.
4. Contracts provide for complete control of operation cost by SPA, so it is impossible to pass on any cost to SPA that is not completely justified.
5. Much better public relations can be had by local cooperative operation rather than remote controlled Government operation.
6. SPA will have every benefit of transmission line use that it would have any other way at less cost and trouble.

Concurrence with the action of the House will start operation of these contracts and save the very existence of the REA cooperatives of the Southwest area.

INTEGRATION WITH SPA

Mr. GREEN. Mr. Chairman, I will give an oral statement concerning this problem. First I would like to tell briefly what exists today in the area on this problem of integration with SPA.

These systems, as you know, have been constructed and completely interconnected with the SPA transmission system. They have been operating for well over a year or a year and a half, and in the case of Central for 2 years. The physical situation is that they are now interconnected and operating, and they have been operating perfectly, we think. There is no other thing to do physically, not a dollar need be spent to make them continue to operate perfectly. We think if the bill as passed by the House comes through in final passage that it will be a very simple matter to put the contracts into operation, because the cooperatives are now operating these facilities completely with their own personnel and equipment.

Please note, that one of the requirements that the House suggested in its report is that the cooperatives will operate their own systems. In the contracts themselves, there is provision for our operation in case the SPA does not operate. That is provided in the existing basic contracts.

It is, therefore, we think, not difficult to put the contracts into effect overnight without any change whatever in physical equipment of the two electrical systems.

OPERATION OF TRANSMISSION SYSTEMS

Chairman HAYDEN. You are referring to that provision in the House report which says that the G. and T. cooperatives will operate and maintain their own transmission systems under lease to the SPA?

Mr. GREEN. Yes, sir. That is going on right now. We are operating our system and have been for 2 years. In our case our cooperative has already authorized, approved, and sent to the Southwestern Power Administration amendments to accomplish these changes. These proposed amendments are in SPA's hands now. We think it is a very simple matter to amend these contracts.

I believe Mr. Wright testified the other day that in 30 days he could have the first contract amended. We agree with that. But, of course, it could take a great deal more time if Interior wanted to delay it.

PATTERN OF CONTRACT COMPLETION

Chairman HAYDEN. If one was completed in 30 days, it would set a pattern?

Mr. GREEN. Yes, sir. All these contracts have the same language. But we have no assurance that Interior will expedite the amendments.

Senator ELLENDER. I wonder if the witness or anybody present could answer this charge made by Mr. Warren, that the G. and T. cooperatives in Missouri utilizing the rates then in effect actually made the Government pay over a million dollars per year for the privilege of giving away 453 million kilowatt-hours of hydroelectric energy?

Mr. GREEN. Senator, we have Mr. Treadway here who has made some studies on that, and he will be a witness in a few minutes.

Senator ELLENDER. I think it would be very apropos for somebody to answer this charge. Mr. Warren states he made it some time ago, and he stands behind it today.

Mr. GREEN. I think it can be answered.

Senator ELLENDER. It might also be well to go into the matter of why the contracts with the G. and T.'s were not signed when Mr. Chapman was in office. I would like to go into a little detail about that later on.

Mr. GREEN. Yes, sir. Again since time is short, I would like to reiterate from a practical operating standpoint in the field, we see no difficulty whatever of putting these contracts into effect immediately. Then we can proceed to amend the contracts and make the amendments retroactive to the first day of the fiscal year. All we have to do then is make accounting adjustments, which are also provided for in the existing contracts. We think, therefore, that the bill's language as it is will suffice. That is all I have.

Chairman HAYDEN. Who is your next witness?

Mr. BLALOCK. I believe that the House committee intended for these contracts to be put into effect immediately, and we can work out these amendments later. We don't think there is any difficulty in connection with that at all. We well remember, Mr. Chairman, based upon a House report in 1953 that the Government withdrew from these contracts more rapidly than General Patton's tanks ever rolled over France and Germany. I was with the Government at that time, and in 24 hours' time, every man and every truck was withdrawn from these cooperative lines and left completely unmanned and unprotected. The Government withdrew that fast.

We believe that they can move just as rapidly in going back into these contracts. We were uprooted overnight like snatching a plant out of the ground and left without any help. Now we believe we can and should be replanted just as quickly. With respect to the legal question, we have Mr. Wise with us. He has been with this problem for a long time, and we believe he can be of help to the committee at this time.

STATEMENT OF WILLIAM C. WISE

PREPARED STATEMENT

Chairman HAYDEN. Your statement may be inserted in the record. (The statement referred to follows:)

STATEMENT OF WILLIAM C. WISE

Mr. Chairman and gentlemen of the committee, my purpose in testifying is to clarify for the record the meaning and status of the case of *Kansas City Power & Light Co. et al.* v. *McKay et al.*, which the Court of Appeals of the District of Columbia has ordered dismissed.

This is a suit in which 10 Missouri electric utility companies sought to enjoin the named Government officials from—

(1) Lending or disbursing funds of the United States to SPA or to certain G. and T. cooperatives for the construction by the latter of electric generating and transmission facilities, for the rental of the cooperatives' transmission facilities by SPA, and for the purchase of electric power from the cooperatives by SPA; and

(2) Doing anything in furtherance of an alleged plan by which SPA would in effect construct and acquire control of these generating and transmission facilities contrary to law.

The companies also asked the court to declare the defendants had no right, power, or authority to carry out the alleged plan.

The defendants moved to dismiss the complaint for the reason, among others, that the companies did not show any injury or interest entitling them to sue. The district court denied the motion to dismiss and held a trial upon the issue of the legality of the loan contracts and the contracts between SPA and the cooperatives. The district court, in an opinion by Judge McLaughlin handed down on June 17, 1953, declared the contracts and agreements valid in all respects and authorized by the Rural Electrification Act and by the Flood Control Act of 1944, respectively. The opinion was a most thorough and sweeping one, and took up each point raised by the companies against the legality of the contracts. In each instance the court held that there was no merit to the contentions of the companies. The opinion expressly stated that "the operations of SPA are in accordance with the congressional mandate" and "it is apparent that the contracts do not circumvent the limitations imposed by Congress upon the electric utility operation of SPA."

The electric utility companies appealed the decision of the district court to the United States Court of Appeals for the District of Columbia Circuit (No. 12067), which handed down its opinion on April 28, 1955. The court of appeals held, in a 2 to 1 decision, that the defendants' motion to dismiss should have been granted by the lower court and accordingly vacated the judgment of the district court and remanded the case to the district court with directions to dismiss the com-

plaint of the companies, holding that the companies had "no basis for asserting that the competition which will be provided by SPA's activities is illegal as to them" and also said that "no judicially enforcible right of the plaintiffs has been disregarded by the administrative action brought before us for review."

The opinion also contained the following language:

"It is indisputable that the essence of plaintiffs' complaint is the competition which they will suffer if the Government's contracts are carried out. They can claim no other interest or injury. The defendants have not undertaken to regulate them in any way. They have not been ordered to abandon any of their activities or to forego the expansion programs planned by them. They have not been subjected to any obligation or duty. Their sole interest and objective is to eliminate the competition which they fear. Controlling decisions of the Supreme Court, dealing with other electric power contracts of the Federal Government, establish that an interest of this kind is not sufficient to enable them to sue to enjoin execution of the power contracts and program of the Government. (See *Alabama Power Co.* v. *Ickes*, 302 U. S. 464 (1938); *Duke Power Co.* v. *Greenwood County*, 302 U. S. 485 (1938); *Tennessee Power Co.* v. *T. V. A.*, 306 U. S. 119 (1939).)"

The G. and T. cooperatives filed an amici curia brief in both the district court and the court of appeals in which the cooperatives urged the court to hold that the companies had no standing to sue. Thus the decision of the court of appeals was a complete victory for the cooperatives.

From the foregoing it can be seen that we now have this situation: The district court passing upon the merits, upheld the legality of the action of SPA and the cooperatives in all respects. The court of appeals then held that the district court should not have heard the power companies' case in the first place and accordingly vacated the judgment of the district court and ordered the complaint of the companies dismissed. However, the court of appeals did not in any respect detract from the opinion expressed by the district court on the merits of the case. We still have this most thorough statement by the district court judge as to the legality of the action of the SPA and the cooperatives. That opinion of the district court will continue to be quoted by lawyers in briefs and by other courts in opinions in support of the principles enunciated therein, with the notation that on appeal it was held the plaintiffs had no standing to sue. In short, it can be stated that the cooperatives scored a complete victory on the merits in the lower court and a victory on technical grounds in the court of appeals.

The court of appeals has, within the past 2 weeks, denied the petitions of the power companies for reargument of the case and for a hearing before the court en banc. The denial of the hearing before the court en banc was the per curiam ruling of the entire eight judges of the court, with no dissent noted.

GENERAL STATEMENT

Mr. WISE. My name is William C. Wise. I am an attorney. I served as local counsel for the G. and T. cooperatives in submitting a brief as a friend of the court in connection with the case of *Kansas City Power and Light Company, et al.* v. *McKay, et al.*, to which Mr. Arnold referred.

My purpose in testifying is to try to clear up what I consider to be the erroneous impression which was left here by Mr. Arnold with respect to that case.

Senator Dworshak asked how could your committee be expected to grasp this problem in a few minutes once a year, when the courts and the people involved in it have not been able to solve it.

I submit the courts have solved it and solved it completely. Unfortunately they did not come up with the solution that Mr. Arnold wanted. He does not want to accept their opposite solution. I do agree with him that I think it is very important for this committee to study the history of that case. We have copies here—which we will put in the record—of the lower court opinion, and the opinion of the court of appeals. In the lower court case, the Government did go in—and the G. and T. cooperatives came in and filed a brief as

a friend of the court—urging the court not to hear the case, taking the position that no legal right of the companies had been violated, and therefore they had no standing to sue.

The lower court did not accept that position, but went ahead and heard the case. I may tell you that Mr. Arnold did not have 30 minutes or 3 days, but he had 3 weeks—he and his colleagues—which they used to present this case to the court. It is a most voluminous record, and they also filed a very lengthy brief in the lower court, which, of course, they did again in the upper court. They presented to the court every point which Mr. Arnold made here this morning with respect to the legality of the contracts in this arrangement, and also every point that Mr. Wilkes and Mr. Arnold and the other gentlemen have been making over the last decade, when they have appeared before this committee and the House committee year in and year out in opposition to what the cooperatives tried to do. They presented every point to the court.

If you will read the opinion, you will see the court repeats those points. That lower court, the district court here, took up every point which the companies have ever made. They took it point by point, based on each one of them, and they did not give Mr. Arnold the solace of deciding in his favor on even one point. On every point they decided in favor of the cooperatives.

I won't take your time to read any of the opinion except the final comment which the court made which fits in with Mr. Arnold's points today. I don't mean the final comment made, but a comment which the court made which applies to the comments Mr. Arnold was making here this morning. The court said:

> The operations of SPA are in accordance with the congressional mandate. It is apparent that the contracts do not circumvent the limitations imposed by Congress upon the electric utility operation of SPA.

I think that sums it up. The opinion took up every one of these points about: serving rural areas, the persons already receiving service, this being a means of SPA doing something through these contracts which they could not do themselves. The court just went down through every point, including the security question, and decided in favor of the cooperatives.

Of course Mr. Arnold did not like that decision when it came down, and it was appealed to the court of appeals, at which time the cooperative filed the brief amici curiae, and I represented them. That is why I am here today. I represented them as their local attorney in Washington, because the case was argued here.

The court of appeals did not reflect in any respect on the opinion of the lower court. What they said was the same thing that the cooperatives had said originally, and what the Government had said, that no legal right of these companies had been violated so they have no right to be in court.

The mechanics whereby the court of appeals did that, it is true, was to vacate the judgment of the lower court, remand the case to the lower court with instructions to do what the cooperatives wanted the lower court to do in the very beginning, that is, dismiss the complaint of the companies. At no place did the court of appeals ever reflect upon the opinion of the lower court. That opinion stands. It will be an opinion which will be cited in the future not once but hundreds of times by lawyers and other judges in other opinions in support of

the principles enunciated in that case. It is true you will footnote it and say this case on appeal was decided on another ground, but in favor of the same parties, that is, in favor of the cooperatives or in favor of the Government.

Also, in the language of that upper Court opinion they said this, and I will read it very fast:

> The companies had no basis for asserting that the competition which will be provided by SPA's activities is illegal as to them.

The court of appeals also said:

> No judicially enforceable right of the plaintiffs has been disregarded by the administrative action brought before us for review.

Then they went on and said this:

> It is indisputable that the essence of plaintiff's complaint is the competition which they will suffer if the Government's contracts are carried out. They can claim no other interest or injury. The defendants have not undertaken to regulate them in any way. They have not been ordered to abandon any of their activities or to forego the expansion programs planned by them. They have not been subjected to any obligation or duty. Their sole interest and objective is to eliminate the competition which they fear. Controlling decisions of the Supreme Court dealing with other electric power contracts of the Federal Government establish that an interest of this kind is not sufficient to enable them to sue to enjoin execution of the power contracts and program of the Government.

Then the opinion cites the cases which support that position.

So today we have a complete victory in the lower court on every point ever raised by the power companies. Then we have on appeal no passing on the merits at all. The court said as Mr. Arnold pointed out that they would not pass on the merits although they did make comments about the legal rights which the companies had, and that they have not been violated, which I have read, but they said we decide this on the technical ground that the companies have no standing to sue.

So the courts have disposed of this matter completely, Senator Dworshak. The companies were not satisfied with that decision. Mr. Arnold and his colleagues filed a petition for rehearing. They filed two, one a petition for a rehearing before the same panel of the court of appeals which heard the case the first time. And the other a motion to have the argument heard over by the entire bench of the court of appeals, which now consists of eight judges, there being one vacancy.

The two judges who decided the case before, with Judge Prettyman not participating turned down their petition for rehearing and the entire court, with no dissent noted, turned down their motion for a rehearing by the entire court.

So here we have a complete victory on every point on the merits in the lower court the legal validity of which has not been questioned at all by the appellate court, and a complete victory in the court of appeals on the technical ground, which is what we urged all along.

From the standpoint of Congress and good government, and from the standpoint of the co-ops the technical decision of the court of appeals is more desirable. If these companies could come in and harass the co-ops every time they enter into a contract with the Government, we would be, as we are here, dragging it out interminably. Under this decision, they have no right to question it at all. We feel the matter is disposed of completely.

STATUS OF CASE

Senator ELLENDER. What is the status of the case?

Mr. WISE. The court of appeals turned down the petition for rehearing.

Senator ELLENDER. I understood you to say it was remanded.

Mr. WISE. It was, with instructions to dismiss the complaint of the companies entirely. Mr. Arnold explained before you came in, Senator, that they are filing a petition for a writ of certiorari with the Supreme Court.

Senator ELLENDER. What do you think these companies are doing this for? Let us know. Give us your own idea on it. I think I have my own but I would like to get yours.

Mr. WISE. I am giving this not as a lawyer, but as one associated with the cooperative program.

Senator ELLENDER. Speaking as a citizen.

Mr. WISE. It is quite obvious that here is a plan—the original contracts which the cooperatives are asking you to reactivate—which carried out as no other plan could the mandate in the act referred to by Mr. Arnold, that these projects should be operated on a sound businesslike basis, and which gave benefits to the cooperatives which resulted in the cheapest possible power for the farmers.

YARDSTICK SITUATION

It is the old yardstick situation. That shows that in the past these farmers have been greatly overcharged. I think the reason that Mr. Wilkes and these other gentlemen have been back in here each year, I think the reason this court case has been dragged on and on and on and now they are filing a petition for certiorari, which can cause no one any concern because the chances of the Supreme Court granting any such petition on the basis of the authority cited in the court of appeals is so remote as to be laughable, if it were not for the effect that it might possibly have on this committee—the companies are doing all this to keep from coming into operation the plan which will show how cheap power can be sold to the farmers when they are given an opportunity to work out their own problems in connection with the Federal Government development of hydro dams. I think that is the only reason for doing it, Senator.

Senator DWORSHAK. You probably do not agree with exhibit A and exhibit B submitted by Mr. Porter alleging that a large loss in the form of a subsidy is involved in this contract?

Mr. WISE. No, sir. I don't have the figures. I think Mr. Treadway does. I think he put them in the House record. I doubt he will have time to do it here. It is my own opinion from my personal knowledge in going over the study prepared by Mr. Treadway that the facts are to the contrary. If Mr. Porter's plan went through, there would be a violation of the preference law, because the power would be taken away from the preference customers in Louisiana, Texas, and the southern part of the Southwest area, and moved up to Mr. Porter's company and given to him using the Northwest Cooperative as a conduit through which to do it in violation of the preference law.

In addition, dollars and cents wise, the best way for the Government to get the most out of this is to tie in with a friendly steam source—such as a cooperative's—which will be willing to operate it for the benefit of the Government, as well as for its own benefit, which will mean more revenues for the Government, and cheaper power for the farmers.

I completely disagree with Mr. Porter's conclusion.

Senator DWORSHAK. You think it is a good contract so far as Southwestern Power is concerned and the Government?

Mr. WISE. Yes, sir; the best that anyone has proposed so far.

Senator ELLENDER. Do you not think that in the long run this thing will work itself out if only you have cooperation from the private utilities there and the Government?

Mr. WISE. All I can say, sir, is that this has dragged on for several years.

Senator ELLENDER. I know that. I would like to see it settled one way or another.

Mr. WISE. We think it has been settled by the courts. It has now been settled by the House. There is only one step remaining. If this committee and the Senate will settle it, we assure you that in our opinion this will mean the most revenue to the United States Treasury, and the cheapest power to the farmers. Thank you.

Mr. BLALOCK. Mr. Chairman, if I may, a letter has come over for you by messenger, and I would like to present it to you. Mr. Chairman, I don't know how much of that time was charged against us. We hope that the question period will not be, and that you will be kind enough to give us a few more minutes. We would like to answer this subsidy question, and as briefly as possible this matter of high rates and so forth that Mr. Porter spoke about.

I would like for Mr. Treadway to take the stand now, and give some help to the committee with respect to this matter.

SOUTHERN ENGINEERING CO., ATLANTA, GA.

STATEMENT OF T. FOLEY TREADWAY, ENGINEER

PREPARED STATEMENT

Chairman HAYDEN. Very well. The statement may be inserted in the record.

(The statement referred to follows:)

STATEMENT OF T. FOLEY TREADWAY

Mr. Chairman and members of the committee, my name is T. Foley Treadway. I reside at 250 East Parkwood Road, Decatur, Ga. I am a registered professional engineer and a partner of Southern Engineering Co. of Atlanta, Ga.

My firm has had a wide range of experience in rural electrification work and we are actively engaged in engineering of various sorts for some 100 rural electric cooperatives throughout the eastern part of the United States. We have done or are doing power supply studies for statewide or area groups in Ohio, Indiana, Pennsylvania, New York, Virginia, North Carolina, South Carolina, Georgia, Missouri, and Oklahoma.

Shortly after the cooperatives in the Southwest were aware that they must seek alternative solutions to their Government contracts, an association of the six directly or indirectly affected generation and transmission cooperatives was formed. Sothern Engineering Co. was then retained by this group to give technical assistance and consultation relative to the problems confronting the cooperatives.

Since this time, for almost 2 years we have been engaged in this work. We have prepared numerous studies of power costs under alternative power supplies and arrangements. We have assisted with drafting of proposals and negotiations with certain of the private utilities in the area in an effort to find suitable solutions.

I have been requested to present to you the technical results of some of these efforts.

On September 16, 1953, we sent invitations to the 10 power companies who were directly interested in the problem of the cooperatives in the southwestern area. At a meeting on October 1, 1953, in Springfield, Mo., officials of these 10 power companies met eith representatives of the six G. and T. cooperatives at which time the problem confronting the cooperatives was outlined to the companies and the need to negotiate satisfactory arrangements with the companies' alternative to the Government contracts was made known. The companies indicated willingness to participate in this endeavor. It was recognized that due to the comparative size of the cooperatives' facilities, the much larger company systems would be the controlling factor and, therefore, they were requested to make initial studies indicating the extent to which cooperative facilities could be integrated into their systems for greatest economy to both parties.

It was soon apparent that the problems in each company area required special attention and, therefore, the negotiations by agreement were conducted between individual cooperatives and the affected companies. Those negotiations have been in progress intermittently since that time to the present date.

As engineers we were concerned not only with the possibility of a satisfactory arrangement with the companies but felt it necessary to investigate alternative solutions. There were four distinct possibilities of solution:

1. Integration with power companies.
2. Integration of cooperative facilities for operation as independent system.
3. Operation by cooperatives as isolate units.
4. Restoration of the Government contracts.

1. Integration with power companies

The best efforts of all parties concerned have failed to produce a proposal including a rate which is satisfactory to the cooperatives. In the case of Western Farmers Electric Cooperative, the Oklahoma Gas & Electric Co., and the Public Service Company of Oklahoma have presented a proposal which on analysis indicates a resulting cost of power to the Western Farmers Cooperative of approximately 9.6 mills per kilowatt-hour delivered.

The Central Electric Power Cooperative has had a cost analysis from the Union Electric Co. which indicates a resulting cost of power amounting to 10.2 mills per kilowatt-hour.

The cooperatives have made investments approximating $70 million in facilities based upon a lower rate which was expected from the Government contracts. Any arrangement which results in higher rates to the cooperatives will result in a reduced use of power and a reduction in the net return to the cooperative which must be used to retire the indebtedness to the Government through REA. Therefore, not only must the rate resulting from any arrangement be low enough to permit the cooperative to exist and repay its indebtedness to the Government, but it must be based on sound economic principles which can be defended against future attack. Any rate which is not sound and cannot be supported satisfactorily would not serve as a suitable solution to this problem.

Of course there are other considerations in the proposed company contracts subject to negotiation to a satisfactory conclusion but the principal item to be resolved is the matter of rate.

Efforts have been made to produce the desired economic results by arrangements integrating the companies' facilities with the hydro power of SPA. This appeared to offer some possibility but apparently it has been found that so much of this hydro power will be required to produce the desired economic results that there is not enough hydro power to go around. Certain preference customers, and in fact, whole areas will be excluded from the benefits of SPA hydro power because such large quantities of this hydro power must be traded to the companies for a resulting rate.

After almost a year and a half of effort, therefore, we find no satisfactory solution forthcoming from our efforts to integrate with the power companies in the area. In those cases where negotiations have proceeded to a point that the rate is clearly indicated we find it to be entirely unsatisfactory and unacceptable.

2. Cooperative power pool

In the studies of the alternatives listed above it was found that the most economical arrangement for the cooperatives independent of the companies and without the Government contracts was an integration of the Missouri cooperatives with a pooling of load and facilities. The cost of power with, and without, the old contracts is shown in the following tabulations (assuming 1958 loads):

	Without old contracts		With old contracts	
	Cost	Mills per kilowatt-hour	Cost	Mills per kilowatt-hour
Central	$843,202	13.622	$443,204	7.16
KAMO	1,771,734	12.477	1,016,720	7.16
Western	1,954,180	9.820	1,424,840	7.16
Sho-Me (at 69 kilovolts)	1,391,334	8.862	1,124,120	7.16
N. W	1,746,184	14.218	1,403,530	11.428
Total	7,706,634	11.288	5,412,414	7.928
Difference	+2,294,220	+3.360		

For the next 30 years of the REA loans remaining it will be seen that the cooperatives would pay $231,199,020 for power if the old contracts are not reinstated.

Under the old contracts with SPA and assuming that the proposed schedule A (revised) rates will apply, the cost of power over the same 30-year period would be $162,372,400. The difference between those two costs of power would be $68,826,620.

It is thus seen that the increase in power costs by elimination of the Government contracts would cost the cooperatives an amount roughly equivalent to the total amount of indebtedness to the Government through the Rural Electrification Administration.

It is obvious that the cooperatives cannot stand to have the obligation doubled by an increase in the cost of power of any such amount.

It should be borne in mind that we are not now deciding whether or not to build the $70 million worth of cooperative facilities. This investment has already been committed by the cooperatives irrevocably and must be paid out.

Since the efforts to negotiate satisfactory alternative contracts has failed to produce the desired results, it is apparent that it is impossible for the cooperatives to undertake the tremendous job of paying the increased cost which results from the elimination of the Government contracts.

3. Operation by cooperatives as isolated units

Studies of operation of the cooperative systems as isolated, unrelated units indicates power costs exceeding the pool arrangements by about 10 percent.

ECONOMIC FEASIBILITY FOR SPA

In a rather comprehensive study of the cost to SPA of operation under the old contracts we have found the following results:

Total combined SPA cost of hydro and co-op steam after implementing G. and T. contracts (interconnected system of SPA)

Energy cost, $7,090,000 per year equals 3.02 mills per kilowatt-hour.
Capacity cost, $10,173,886 per year equals $16.82 per kilowatt-year.
Total cost, $17,263,886 per year.
At 50 percent load factor (co-op or municipal loads):

1 kilowatt, at $16.82 per year	$16.82
4,380 kilowatt-hours per kilowatt year, at 3.02 mills per kilowatt-hour	13.23
Total	30.05

$30.05÷4,380=6.86 mills per kilowatt-hour

The total cost of all items is included in the above and the result is related to capacity and energy components. If the Government collects rates which are compensatory for these two components, they can sell power to all preference

consumers (at 50 percent load factors) at rates equal to or below the presently filed schedule A, revised rate.

It is therefore our conclusion that returning to the continuing fund contracts will not increase the Government burden or rates for power.

Returning to the continuing fund contracts will result in a melding of steam and hydro power for the most economically efficient operation possible. Hydro power in the Southwest, available in large quantities for short periods (peaking power), must be supplemented by steam to be of economic value in the ultimate consumers market for power. Steam power, on the other hand, is most economically used when it can be operated at full load round the clock. A large measure of both economies is realized when steam is base loaded and hydro takes the variable peaks.

The rates at which power is sold by SPA will depend upon the overall marketing practices and policies of the agency. The presently filed rates, including schedule A (revised), were based on the proposition that SPA did not have responsibility for marketing power under the G. and T. contracts. These contracts provide the Government with the steam-power complement needed by hydro peaking power for a full power supply to preference customers.

To be realistic, the rate must be based on the marketing practices made possible by operation of the G. and T. contracts.

Integration between the Government hydro and co-op steam, through the co-op transmission system accomplishes the following:

1. Modifies the character of the power available for preference customer load. The Government will increase its capacity by 85,000 kilowatts and its energy by 637,500,000 kilowatt-hours per year. The resulting total kilowatt-hours per kilowatt will more nearly match the quantity required to market power on a sound business basis.

2. Opens the market for the Government, through the co-op transmission facilities so that the power can be utilized on the most widespread basis.

3. Permits the Government to realize the benefits of integration and to pass on directly to preference customers in the form of lower rates, thus giving a sound basis for lasting benefits.

Returning to the old contracts will require some modifications of terms consistent with the expressed desire to eliminate the purchase option and the lease arrangements now available to the Government. Modifications of these features in the contracts will require some negotiations; however, careful and current studies have been completed to determine the co-ops' costs for purposes of entering such negotiations and it is felt that with a sincere effort to resolve these problems a suitable solution will be the result.

GENERAL STATEMENT

Mr. TREADWAY. Mr. Chairman, my name is T. Foley Treadway, of Southern Engineering Co., Atlanta, Ga. We are engineers for the G. and T. cooperatives, and have been for almost 2 years in their efforts to negotiate a satisfactory solution to this problem.

In the course of that representation, we have made numerous studies of an economic sort, and dealt with the power companies in an effort to work out the solutions. One thing that troubled us was the economic results of the cooperatives standing alone and operating in isolation if we were forced to do it.

I would like to ask you to refer to the tabulation at page 5 of the statement I have just filed, where you will find what we consider to be the economic results of the situation imposed by being forced to stand alone and operate in isolation in this matter.

The average rate paid for power would be 11.288 mills per kilowatt-hour as opposed to 7.928 mills per kilowatt-hour if the old contracts are reinstated.

The effects of that in a 30-year period are pretty apparent, the difference being some $2¼ million per year, amounting to about $68,826,000 over the 30-year life remaining in these facilities.

Another factor that interested us and concerned us was the possibility of economic feasibility for SPA, the same question that has been raised here this morning. I believe in the analyses that were made of this situation sometimes the other people lose sight of the usefulness of these facilities provided by the cooperatives to the Government. These facilities will provide an additional 85,500 kilowatts of capacity to the Government for its use. That capacity is steam capacity, and capable of producing large quantities of electric energy which the Government has a deficiency of. The energy available conservatively from these plants is 637,500,000 kilowatt-hours per year. That means that the very nature of the power available for sale by the Government can be modified to make it marketable on a more feasible sound businesslike basis than it is possible to do without steam firming.

It is a natural characteristic of the utility business that steam and hydro power tend to complement each other, especially if the hydro power has the characteristic of being peaking power, as is the nature of the hydro power of SPA.

Chairman HAYDEN. What you are saying is that the cooperatives have steam plants which can perform the same service that private utility steam plants perform in firming up power, that is, if you have water in the reservoir, you have a peak load of power during certain periods of the day. You let the water out during those hours and the power thus generated can take care of the peaks.

Mr. TREADWAY. That is right.

Chairman HAYDEN. That is all there is to it. It does not make any difference whether you are doing business with a steam plant that belongs to a private utility or a steam plant that belongs to a cooperative; they both serve the same purpose.

Mr. TREADWAY. So far as that principle is concerned, yes, sir. Especially where the facilities of these steam plants are available to be displaced by the Government as they need the power without restrictions attached. At page 6 of the statement which I filed, we give the result of an economic analysis which we have made, and where you will find that based on the simple assumption that the components of power, namely, capacity and energy, would be marketed by the Government at the cost to produce each of those components, that the rate for the power sold at the load factor of the cooperatives, which would be about 50 percent, would be 6.86 mills per kilowatt-hour, and would be compensatory to the Government.

The new schedule A rate filed recently by SPA for approval by the Federal Power Commission provides for a basic rate of 7.16 mills per kilowatt which is higher than our study shows as necessary to pay out all of SPA's costs. There would be no subsidy on the part of the Government to the operation of these contracts. They would be compensatory.

I believe that time is short, sir, and I have tried to come right to the point with these statements, and I hope that throws some light on the situation.

Senator ELLENDER. So the statement made by Mr. Porter to the effect that the arrangement results in the Government paying over a million dollars per year for the privilege of giving away 453,000 kilowatts of hydroelectric energy is not correct?

Mr. TREADWAY. I have not studied that statement. I don't know how that statement was made and in connection with what. But I certainly cannot agree with Mr. Porter's statement.

GOVERNMENT SUBSIDIES

Senator ELLENDER. In your studies have you detected any subsidies being paid on the part of the Government?

Mr. TREADWAY. On the contrary, sir, I find that the operation of these contracts in my opinion puts the Government in a sounder business position than they would be otherwise.

Senator ELLENDER. Is the power generated by G. and T. coops generated as economically as would be the case if the facilities were owned and operated by a private concern?

Mr. TREADWAY. The steam facilities or the whole business?

Senator ELLENDER. I mean the steam facilities, the question we have heard so much about.

Mr. TREADWAY. With the same steam facilities I can't see that there would be any reason for any higher cost of operation. The cooperatives can operate their facilities as efficiently as the companies.

Senator ELLENDER. Could all of the power that is now being generated in that area be utilized if it were handled properly; that is, through contracts or through mutual agreements with the privately owned concerns, between the Government and the cooperatives?

Mr. TREADWAY. I have no doubt of that, sir. I think the market certainly exists for the power in the area. It is a very rapidly expanding area. So far as loads are concerned, I think that the companies have been hard pressed from a pure point of timing to get generation committed as fast as the loads have developed. I don't think there has been any shortage because that is an elusive thing. It is hard to measure because it is something that does not exist.

I do know that the companies are having to build as fast as they can and notwithstanding the operation of all of these facilities that we are talking about, and certainly will be needed in the future as will be certain other projects that are proposed.

Senator ELLENDER. I may say that I was one of those that criticized the method by which these plants were erected. I took the position later, however, that since they were erected, it struck me then as it does now, that the privately owned utilities should try to cooperate to the end that this whole matter can be settled without any further delay. As far as I am concerned, I am going to keep on voting for funds in order to let the cooperatives operate if that is the way they want it. I am very much in hopes that this will be the last time that this little cat-and-dog fight is going to be brought before this committee.

Mr. TREADWAY. Sir, I would like to say this in that one connection. Again in my statement I think I have agreed with you to this extent, that there seems to be a tendency to want to back off and try to decide whether we shall build this $70 million worth of facilities, foregetting that they have been constructed and there they are. We don't have that privilege. We have to operate the, and the thing to do is to operate them as economically for all parties concerned as we can do it.

Senator ELLENDER. I think it is to the interest of the Government that that be done.

Mr. TREADWAY. Yes, sir.

Senator ELLENDER. We certainly don't want to lose anything by it. As I said, I think it was a poor way to do it, and an indirect way to do it, that is, for two Government agencies to be working with each other and finally accomplish what they did. But it is a fait accompli, as it were and now the plants have been erected. These big power lines have been built, and the matter ought to be handled so that the Government will get every cent that it has invested in that, and that a fair rate can be accorded to those cooperatives for whose benefit plants were erected.

PERCENTAGE OF STEAM AND HYDRO POWER

Senator DWORSHAK. What percentage of G. and T. cooperatives' present power is hydro and what percentage is steam?

Mr. TREADWAY. Of their present demands?

Senator DWORSHAK. The present generation of power of the G. and T.'s.

Mr. TREADWAY. The G. and T.'s presently, sir, have a demand of the order of 150,000 kilowatts. That would be my estimate today. That is a quick figure. The cooperatives combined today have generation totaling 85,500 kilowatts. So they would be deficient by about 70,000 kilowatts.

Senator DWORSHAK. I guess I did not make myself clear. Is G. and T. currently getting any of its power which it has contracted for with Southwestern Power from hydro, or is it all from steam?

Mr. TREADWAY. They are getting hydropower through interim contracts with SPA that have been in effect during the time that this matter has been under consideration by the Congress. They are getting hydropower.

Senator DWORSHAK. What percentage?

Mr. TREADWAY. I don't know, sir.

Senator DWORSHAK. Ultimately, will the entire project envisioned by G. and T. provide for almost all steam or would there still be much hydro?

Mr. TREADWAY. No, sir. In the 10-year average ahead of us, the cooperatives will have a demand of somewhere of the order of 190,000 kilowatts, and they have only 85,000 kilowatts of steam. So that approximately 50–50 hydro and steam would apply if their own plants are used against the load.

Senator DWORSHAK. Maybe I misunderstood it, but the G. and T. is currently contracting with Southwestern Power to furnish power which then will be furnished subsequently to the REA's and preference customers.

Mr. TREADWAY. That is right, sir.

Senator DWORSHAK. The G. and T. power now is almost entirely steam?

Mr. TREADWAY. No, sir. It cannot be, because they do not have enough capacity to meet the need. They are in need of hydro capacity at this time.

Chairman HAYDEN. The Senator means the power made by the G. and T.'s is all steam.

Mr. TREADWAY. That is right. I am sorry, sir. All of the power produced by the cooperatives is steam power. But they are deficient of sufficient power to take care of their total needs in the area.

Senator DWORSHAK. The REA's under their preference rights have the right to purchase power from Southwestern Power from plants operated by the Government.

Mr. TREADWAY. They are given that in section 5 of the flood-control law. We exercise that right in the contracts we have under discussion right here.

Senator DWORSHAK. Are you getting much hydro power under those contracts?

Mr. TREADWAY. Those contracts are inoperative. We are getting power under substitute interim arrangements which have been used to carry on the power supply of the cooperatives while this matter of these contracts is under discussion.

Chairman HAYDEN. We thank you, sir.

Mr. BLALOCK. Mr. Chairman, we beg a few more minutes. Mr. Alex Radin would like to have about 2 minutes, and I would like to have about 2 minutes to close.

Chairman HAYDEN. Very well.

THE AMERICAN PUBLIC POWER ASSOCIATION

STATEMENT OF ALEX RADIN, GENERAL MANAGER

PREPARED STATEMENT

Mr. RADIN. Mr. Chairman and members of the committee, my name is Alex Radin. I am general manager of the American Public Power Association. We are a national trade association representing primarily municipally owned utilities throughout the country.

I have a statement here which I would like to file for the record on behalf of the Board of Public Utilities of Springfield, Mo.

Chairman HAYDEN. That may be done.

(The statement referred to follows:)

STATEMENT OF BOARD OF PUBLIC UTILITIES OF THE CITY OF SPRINGFIELD, MO., IN SUPPORT OF REACTIVATION OF CONTRACTS BETWEEN SOUTHWESTERN POWER ADMINISTRATION AND CERTAIN GENERATION AND TRANSMISSION COOPERATIVES

In March 1945, the city of Springfield, Mo., purchased the electric, gas, steam heat, and transit utilities serving the city and suburban territory adjacent thereto, which have a population of approximately 100,000 persons. These municipally owned utilities are operated by a board of public utilities appointed by the mayor with the approval of the city council.

The city of Springfield has had a steady and uninterrupted growth over a period of several decades and the municipally owned electric system, likewise, has experienced rapid growth and expansion since purchase by the city in March 1945. The number of customers served by the electric system has increased from 22,148 in 1945 to 32,520 at the present time, and the peak system demand has risen from 18,100 kilowatts in 1945 to 42,300 kilowatts last summer—an increase of more than 133 percent during the 9-year period. The demand this summer is estimated to reach close to 50,000 kilowatts.

The rapid increase in demand on the electric system of city utilities of Springfield, Mo., has created a continuing problem of finding adequate sources of power supply at reasonable cost. At the present time the city is operating an old steam powerplant with a total capability of approximately 20,000 kilowatts and a firm generating capacity of only 12,000 kilowatts. The remainder of the city's power requirements is obtained by purchase from the Southwestern Power

Administration and the Empire District Electric Co., of Joplin, Mo. Our contract with SPA provides for a maximum delivery of 15,000 kilowatts, and the remainder of our power requirements must be obtained from the Empire District Electric Co.

Other than our lack of total capacity, the principal feature of our present power supply problem is the extremely high cost of the power purchased from Empire District. This power costs us approximately 11 mills per kilowatt-hour, as contrasted to a cost of generation in our old plant of approximately 7½ mills per kilowatt-hour (including depreciation) and 5.6 mills per kilowatt-hour for the power obtained from SPA. There is now pending a rate increase for the SPA power before the Federal Power Commission, which is expected to increase our average cost to about 6½ mills per kilowatt-hour.

About a year ago we were notified by SPA that they would have no further capacity available for the city of Springfield, and, as a result, the citizens of Springfield voted bonds in the amount of $11,127,000 for the construction of a new powerplant to have a total capacity of 44,000 kilowatts. This plant is expected to be in operation about February 1957. Until that time the city of Springfield will be operating on an extremely narrow margin of total capacity, without any allowance for reserve requirements. A major breakdown of equipment prior to that time would certainly create an emergency and could involve the necessity of power rationing.

Even after the new powerplant becomes available in 1957, we will have a very small margin of firm capacity in excess of our then expected load. By 1959, unless we proceed to add additional equipment, we will again be in the position of operating without reserve capacity. Our estimated need for new capacity in 1959 is approximately 35,000 kilowatts.

We have recently been informed by Mr. Fred G. Aandahl, Assistant Secretary of the Interior, that SPA has 130,000 kilowatts of capacity as yet unsold. He informed us, however, that it is committed to the generation and transmission cooperatives and that none is presently available to Springfield. Upon inquiry as to the status of new capacity which is expected to be available about 1959, from the completion of the Table Rock project and 1 or 2 additional units in the Bull Shoals project, we were informed that this power had not yet been allocated and that our needs would be considered after "contractual relations with the G. and T. cooperatives have been firmly established." We were given the impression that the present plans for this new capacity would involve obligating a substantial segment to the G. and T. cooperatives as well as all of the 130,000 kilowatts presently available.

The city of Springfield is a preference customer of SPA under the preference provisions of the Flood Control Act of 1944. This law does not distinguish as between municipally owned utilities and cooperatives, placing all on an equal footing. It is our understanding that there are other municipalities, also purchasing power from SPA, which are in a position of extreme need for additional capacity similar to our own.

Until about 2 years ago relationships between the SPA and a group of generation and transmission cooperatives in this area were embodied in contracts which provided for the interchange of power with SPA. These contracts utilized the steam generating plants of the G. and T. cooperatives to supplement the SPA supply and provided a "partnership" arrangement of substantial benefit to both parties as a result of the integration of the steam plants into the SPA power supply picture. Through the efforts of the private power companies, together with a radical change in the attitude of the Administration, funds needed to implement these contracts were withheld and as a result they became inoperative.

Since that time, pressure has been brought to bear on the G. and T. cooperatives to endeavor to work out agreements with the private companies in the area which would open the way for SPA to replace the inoperative contracts referred to above with contracts reflecting the new philosophy. Some of the negotiations have reached the point of drafting new contracts which, in brief, contemplate the use of the preference status of the G. and T. cooperatives to purchase capacity from SPA far in excess of their own needs and to, in turn, resell all of this capacity to the private power companies, with the private power companies selling back a portion to take care of the needs of the G. and T. cooperatives themselves. As an example, which we believe is typical of these proposed contracts, one cooperative, whose present load is approximately 25,000 kilowatts, is to buy immediately over 50,000 kilowatts and over 100,000 kilowatts in 1959.

It appears to us that these proposed replacement contracts are a clear evasion of the preference provisions of the Flood Control Act of 1944. It uses the flimsy

excuse of a preference right of a few customers to permit sale of most if not all of the new capacity to be available, as well as capacity still unsold at present, to the private power companies without any consideration of the preference rights of the other customers. At best, it gives a special preference to a few to the detriment of all of the rest of the preference customers.

Our interest in the current effort to reestablish the presently inoperative contracts between SPA and the G. and T. cooperatives stems from the fact that if the old contracts are reactivated, it will effectively block the so-called replacement contracts described above—at least in their present form. The city of Springfield is badly in need of capacity today and will be similarly situated in 1959, and we can see no justification for forcing the city of Springfield to expend millions of dollars for additional generating equipment in order that capacity, built with public funds and to which we have a preference right, may be sold to the private power companies by subterfuge. It is our belief that the interests of the city of Springfield and the REA financed cooperatives in this area would best be served by reactivating the old contracts.

We may be somewhat old-fashioned but we believe that contracts entered into in good faith should be carried out by our Government as well as by private individuals and corporations. We believe that the action of the Government in repudiating the contracts between SPA and the G. and T. cooperatives has been a severe blow to the faith of the citizens in this area in the integrity of their Government. A few determined individuals, strategically placed, aided and abetted by powerful lobby interests, have so confused the issue with legalisms and propaganda to the point that there is a very real danger that facilities, constructed through the expenditure of vast amounts of public funds, may be twisted to the almost exclusive benefit of a few private corporations.

We believe that it is time to reestablish the fact that our Government can be trusted to carry out its contracts and to make it possible for the local public bodies to enter into a true partnership with their Government in solving the pressing power problems of the Southwest.

We respectfully urge that the necessary legislation be enacted to insure the reactivation of the old contracts and to begin the long road back of reaffirming the Government's intention to live up to its obligations.

GENERAL STATEMENT

Mr. RADIN. The chairman of that board was unable to be here in person today to present his statement, and inasmuch as they are a member of our association, they have asked me to present this statement in behalf of them.

I would like to summarize very briefly their position, that is, that this municipally owned utility presently has a contract with the Southwestern Power Administration for about 15,000 kilowatts of capacity. They feel they are also constructing at the present time a steam generating plant of their own of about 44,000 kilowatts, and they are purchasing some power from Empire District Electric Co. They have an old steam generating plant of 20,000 firm kilowatts. The plant they are constructing will be completed by 1957, but by 1959 they estimate they would need additional power, and would like to exercise the preference rights which they have under the law to purchase additional blocks of power at that time from Southwestern Power Administration.

They feel that the so-called replacement-type contracts would result in a larger flow of the Southwestern Power Administration power going to the private power companies through the G. and T. co-ops, and therefore they are in favor of the reactivation of the old type contracts, since they believe that would be the most economical use for the power in the area and would make more power available for their own municipal utility. That in brief is their position.

NEW PLANT AT SPRINGFIELD, MO.

Senator ELLENDER. Why did Springfield find it necessary to build a new plant?

Mr. RADIN. They found they could not get enough power to meet their needs from Southwestern Power Administration. They did approach them initially to see if they could get additional power from them, and they were informed that SPA did not have enough power to meet their immediate needs. They voted last year to build this plant.

Senator ELLENDER. Did they at one time vote not to build the plant?

Mr. RADIN. Yes. I think they were twice turned down by the electorate on that. When it was made clear that SPA did not have sufficient power, they voted by a margin of 9 to 1 for the plant.

Senator ELLENDER. Then it is evident that there is not too much power produced in that area.

Mr. RADIN. There will be additional blocks of power available in 1959 from Table Rock Dam and I believe additional installations at Bull Shoals. So there will be additional power available in 1959. But they feel, and their conversations with the SPA administrator have led them to believe, and also Assistant Secretary Aandahl, that there will be less power available to the city of Springfield under the so-called replacement-type contracts than there will be if these old type contracts are reactivated.

Senator ELLENDER. Would you say that the city of Springfield was induced to build this plant because of a shortage of power in that area?

Mr. RADIN. Shortage of power from SPA; yes, sir.

Senator ELLENDER. Are you sure of that?

Mr. RADIN. I will put it this way. If they were able to buy power from SPA, they would have preferred to do so, I am sure.

Senator ELLENDER. As I remember, the claim was made here that there was too much power generated, and that it could not all be used.

Mr. RADIN. From SPA?

Senator ELLENDER. Yes.

Mr. RADIN. I would not agree with that contention, Senator. Thank you.

Mr. BLALOCK. Mr. Chairman, we appreciate this opportunity to appear before you. We want to tell you that we are just as tired of these annual fights before you as you are, and no doubt as the company officials are. We hope that this will be the last time that we will have to appear in a fight before you here. We think that the way to really solve this problem once and for all is to put these contracts back into effect immediately upon the passage of this bill. We will work out as rapidly as we can the changes that have been suggested by the House committee. Such amendments as are worked out can be made retroactive to the beginning of the fiscal year. We will go back and be good neighbors with the private power companies. We only want our preference rights. If there are any advantages left in this hydro power down there after we have exercised our preference rights, then we are perfectly willing for them to share in those benefits so that they can be passed on to their customers who are also our neighbors and friends. We want to live in peace and harmony, and we want it quickly.

If you gentlemen will just approve what the House did, we will do our very best to be good neighbors in the Southwest.

Chairman HAYDEN. Thank you.

The next witness listed is from the National Farmers Union.

NATIONAL FARMERS UNION

STATEMENT OF ANGUS McDONALD, ASSISTANT LEGISLATIVE SECRETARY

PREPARED STATEMENT

(The prepared statement follows:)

STATEMENT OF ANGUS MCDONALD, ASSISTANT LEGISLATIVE SECRETARY NATIONAL FARMERS UNION, IN SUPPORT OF DEPARTMENT OF THE INTERIOR PROJECTS AND RELATED PROGRAMS

Mr. Chairman and members of the committee, I am appearing here on behalf of 700,000 members of the National Farmers Union who mainly reside in the Arkansas and Missouri Valleys and Great Plains area. I call attention of the committee to resolutions relating to rural electrification and public power adopted unanimously at the last National Farmers Union convention held in Denver, Colo., March 15–19, 1954. As the committee will note the Farmers Union is solidly behind a joint program of resource and power development. Our philosophy is akin to that of Theodore Roosevelt who inaugurated many of the policies which the Farmers Union now advocates or has been advocating over a period of 50 years. We believe that the navigable waters of the Nation belong to all the people and that the benefits of falling water which generates the electricity should be extended to as many people as possible.

Consequently, the National Farmers Union has been active in bringing about various programs carried on by the Department of the Interior and related agencies. The Farmers Union supports the principle set forth in various statutes, commonly referred to as the preference clause. We believe that implicit in this legislation is a directive for the Department of the Interior to build the necessary transmission lines which will bring power from the bus bar to as many farmers as possible. We do not believe in many instances the preference clause has much meaning, if this responsibility is not carried out by the Department of the Interior.

Therefore, we are at a loss to understand why the Department in planning its program does not in several instances recommend to Congress the building of transmission lines which would make possible the carrying out of the preference clause. We suggest to the committee that it is not in the province of administration for officials to decide whether or not in this or that area they should make power available to preference customers. Numerous statutes in effect have directed the Department of the Interior to make power available, consistent with good business practices. In instances where the Department of the Interior has been lagging in the administration of this law, we suggest that explicit language be written into the bill directing the Department of the Interior to carry out the preference clause consistent with the Flood Control Act of 1944 and other acts.

We urge the restoration of the so-called continuing fund in the contracts between the Southwestern Power Administration and the generating and transmission cooperatives. We call attention to the fact that cooperatives entered into contracts with the Government in 1950 in good faith. They borrowed huge sums of money, built steam plants and now have large amounts of firm power which they wish to exchange or sell through the offices of the Southwestern Power Administration. Approval of this fund, I am told by experts, would not entail the appropriation of any money. The amount earmarked which would come from the sale of power is very small compared to the sum that would come to the Federal Government if the contract is revitalized. The 325,000 farmers who will benefit from the arrangement, I submit, are entitled to some consideration. The Federal Government loaned to cooperatives $275 million for distribution purposes and $75 million for generation and transmission. This huge investment is jeopardized unless the original contracts can be brought to life again.

In addition to the continuing fund in the Southwest, the Farmers Union favors an expanded power program which includes Dardanelle Dam on the Arkansas River in Arkansas, Beaver Dam on the White River in Arkansas, Greers Ferry Dam on the Little Red River in Arkansas, and McGee Bend Dam on the Angelina River in Texas. These projects are necessary because of the rapidly growing needs of farmers in the area.

In the Southeast there is a great need for transmission lines which would bring Clark Hill power to preference customers. As the committee is well aware a stalemate exists in this area. The dam has been built, the power is available, the cooperatives want it, yet because the Georgia Power Co. refuses to wheel the power at rates which will benefit preference customers, the cooperatives are not getting low-cost power which they so sorely need. One aggravating factor in the situation is the fact that the Department of the Interior has been extremely uncooperative in working out an arrangement whereby the cooperatives are able to buy the power which they are rightfully entitled to.

We support the recommendations of the Administration in regard to the following projects:

	Kilowatts	Amount
Gavins Point Reservoir, Nebr.-S. Dak	100,000	$13,900,000
Garrison Reservoir, N. Dak	240,000	20,000,000
Fort Randall Reservoir, S. Dak	320,000	7,900,000
Oahe Reservoir, S. Dak	425,000	25,000,000
Palisades project, Idaho	114,000	9,000,000
Yakima project, Washington (Chandler)	12,000	3,000,000
Glendo unit, Wyoming		6,000,000
Glendo	24,000	
Freemont Canyon	48,000	

In addition, we urge the committee to seriously consider the authorization and building of vitally needed transmission lines which include one from Fort Randall to Grand Island, Nebr. We call attention to the testimony submitted to the House Appropriations Committee on May 19, 1955 by Chas. A. Robinson, Jr., staff engineer, National Rural Electric Cooperative Association. In his testimony Mr. Robinson spelled out the great need for transmission lines in the eastern and western Missouri Basin. He pointed out that transmission lines were needed to bring surplus power in Montana to the Dakota area. He also described the great need for the transmission line, commonly referred to as the Minnesota Loop which would bring power from the Garrison Dam to farmers in Minnesota.

Finally, I call the committee's attention to testimony submitted to this committee on May 26, 1955, by Senators Morse and Neuberger and Congresswoman Green. This testimony spells out in some detail the needs of the Northwest, both in regard to Army engineer projects and the Bonneville Power Administration program. We respectfully urge the committee to seriously consider the power program as outlined by these Members of Congress.

GENERAL STATEMENT

Mr. McDONALD. I am Angus McDonald, assistant legislative secretary of the National Farmers Union. We have a number of programs and projects in which our members are concerned relating to the Department of Interior appropriations.

Particularly we are interested in the matter currently discussed now, the reauthorization of the continuing fund. I have appeared, and our people have appeared before House committees and this committee in regard to this matter. We are in complete agreement with Mr. Blalock, and the cooperatives, that it is necessary that the continuing fund be authorized in order for the Government to get its money that it has invested in the area, and in order that the farmers get their preference rights in the form of low cost power.

I think, Mr. Chairman, that is sufficient.

Senator DWORSHAK. Mr. McDonald, in your statement you say you believe the navigable waters of the Nation belong to all the people, and the benefits of falling water which generates the electricity should be extended to as many people as possible. I am convinced that there is not any hydro involved in this dispute at the present time. It all involves steam power, does it not?

Mr. MCDONALD. Senator, the statement still stands that the navigable waters——

Senator DWORSHAK. I am not going to argue that point. But the point is in order to clarify it in my own mind, there is no hydro power involved in this controversy at the present time?

Mr. MCDONALD. Not directly, no.

Senator DWORSHAK. They tried to tell me that G. and T. generates its power exclusively from steam plants. Is that right or is it not right? I don't want to prolong the discussion.

Mr. MCDONALD. As I understand the situation, Senator, you have experts here, and I am not one. The Southwest Power Administration exchanges hydro power with the steam plants. The power is passed around over the area in places where it is needed. So I was incorrect when I said that no hydro power is involved.

INTEGRATION OF STEAM AND HYDRO POWER

Senator DWORSHAK. I think that is true, if we consider that Southwestern Power does take the steam power and the hydro power which it already has and attempts to integrate the two and handle it in a single package.

Mr. MCDONALD. Yes, sir.

Chairman HAYDEN. The National Rural Electric Cooperatives.

NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

STATEMENT OF CHARLES J. FAIN, ASSISTANT GENERAL MANAGER

GENERAL STATEMENT

Mr. FAIN. My name is Charles J. Fain. I am assistant to Mr. Ellis. We have five witnesses. We could present our testimony all at one time to expedite the matter if the chairman wishes.

Chairman HAYDEN. Our time is very limited. Who do you wish to put on?

Mr. FAIN. First of all I would like to say very briefly that we in the National Rural Electric Cooperative Association endorse the action of the House in regard to SPA and the reinstitution of the generation and transmission co-op contracts. We have some other witnesses from the southeast area that we would like to cover some of the problems that are prevalent there. We have Mr. J. A. Ward, president of the Tarheel Electric Membership Corp. We also have Mr. William T. Crisp, who is the executive manager of the State association there, who will speak, and Mr. Alexander Hudgins, who is executive manager of the Virginia Association of Electric Cooperatives, and then closing we would like to present our staff engineer, Mr. Robinson, for a very few brief remarks.

PREPARED STATEMENT

I would like to file this statement for the association, Mr. Chairman. It is a very lengthy statement covering the entire power situation in the United States, and we could not hope to present all of it here today, but we will very briefly highlight some of it.

Chairman HAYDEN. That will be included in the record.

(The statement referred to follows:)

STATEMENT OF CHARLES J. FAIN, ASSISTANT GENERAL MANAGER, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, IN SUPPORT OF APPROPRIATIONS FOR DEPARTMENT OF THE INTERIOR POWER MARKETING AGENCIES

Mr. Chairman and gentlemen of the subcommittee, my name is Charles J. Fain. I am assistant general manager of the National Rural Electric Cooperative Association, which is the service organization of the rural electric systems in the United States and Alaska. About 90 percent of them are members.

This association has traditionally supported, and our membership is unanimously on record as favoring appropriations for multiple-purpose river-basin-development programs where hydroelectric power and necessary transmission facilities are included as principal features—and where such facilities will benefit the rural electrification program.

The rural electrification program in the United States has, from its inception, depended upon the Federal power construction and marketing program as an indispensable tool in the electrification of our farm areas. You, of course, are well aware of the fact that Federal power has been made available in many areas to rural electric systems at rates substantially below that charged by commercial utility companies for similar service. Often adequate power is not available to us from alternative sources at any price. Wholesale power costs represent, on the average, the largest single item of rural electric system operating expense, and the ability of the cooperatives and power districts to serve their share of the one-half million farmers who still remain without central station service largely depends on the continued availability of Federal power at reasonable rates.

In addition to the direct savings enjoyed by our systems which lie within Federal power marketing agency service areas, the competitive influence of the Federal power program on an otherwise closely controlled market is of great importance to the rural electric systems which are on the periphery of areas directly served from the Federal systems, and is a factor that tends to hold the wholesale rates of commercial utility companies within reasonable limits.

The overall consumption of electricity throughout the country by all consumers rose 88.5 percent between the years 1947 and 1954. However, the annual energy used by rural electric systems throughout the country almost exactly doubled between 1950 and 1954. Approximately 25 percent of the rural electric systems purchase wholesale power from the Federal power marketing agencies.

What do the rural electrics asks?—It is our purpose, Mr. Chairman, in appearing today, to support appropriations for construction by the Interior Department power agencies of such multiple-purpose hydroelectric dams and transmission lines as we feel are absolutely essential to the continued growth and development of the rural electrification program throughout the country.

In general, we are supporting the Budget recommendations for these power agencies, insofar as the facilities affect our program. However, in several instances, we are urging appropriations for facilities outside of the President's budget. In several cases where we ask for funds not included in budget requests to build a transmission line or make a study, it is our opinion that the added facility would not only benefit the rural electric systems in the area, but would also assure the Government of adequate revenue to repay the cost of power facilities in a situation where the revenue now being realized is less than that anticipated.

We have broken down our detailed testimony into four major sections, each of which discusses power facilities in an area roughly corresponding to the power marketing area of the particular Department of the Interior power marketing agency involved.

THE SOUTHWESTERN POWER ADMINISTRATION AREA

SPA-G. and T. contracts.—We realize, Mr. Chairman, that the subcommittee has already given considerable attention to the question of the generation and

transmission cooperatives in the States of Missouri and Oklahoma. This is the problem of the contracts entered into during 1950 between the Southwestern Power Administration and the generation and transmission cooperatives under which the Government and the cooperatives agree to full integration of generating and transmission facilities to make available to preferred customers the maximum quantities of firm power from the SPA system.

These contracts between the Department of the Interior and the generation and transmission cooperatives represent an exchange of mutual obligations by the Southwestern Power Administration and the cooperatives involved. Ten of the major power companies in Missouri, represented by probably the leading utility company lawyer and law firm in the country, have been unable, during 4 years of attack in the Federal courts, to shake the legality of these contracts. Just recently the United States Circuit Court of Appeals for the District of Columbia dismissed the power company action. We do not see how there can any longer be reasonable belief that these contracts are not completely lawful.

It is true, the contracts contain a provision relieving the Government from its duty to perform if the Congress does not appropriate the money necessary to carry them out. I point out, however, Mr. Chairman, that these contracts were executed at the time when it was not necessary for the Congress to make annual appropriations to carry them out. At the time of execution, the Southwestern Power Administration was fully empowered to perform under these contracts, using funds available to it from its $300,000 continuing fund. Subsequent to the execution of the contracts, and after the cooperatives had fully relied on them in constructing a multi-million-dollar generation and transmission system, the Congress saw fit to amend the law so that the Southwestern Power Administration would have to seek annual appropriations for implementing power exchange agreements.

I would also call the attention of the chairman to the fact that although certain provisions of the 1950 contracts excuse performance by the Government if Congress fails to appropriate necessary money, there is no provision which excuses Government performance because of a change of philosophy in the administration.

If a change in the philosophy of officials responsible for execution of Federal obligations is a valid ground on which to refuse performance of a contract, then the performance of every contractual obligation of the United States will be effectively subjected to the whim and fancy of administrative officeholders.

Subsequent to the refusal of Congress 2 years ago to appropriate funds for the performance of these contracts, there has been much talk of encouraging the generation and transmission cooperatives to abandon the concepts of the 1950 power exchange agreements upon which they have relied, and to seek integration agreements with local utility companies. For several years, the appropriations committees of the Congress have urged this alternative on the generation and transmission cooperatives. Interior Department officials have openly avowed their opposition to the principles of these contracts and have repeatedly told the generation and transmission cooperative representatives that the Department expects them to forget the original agreements and seek relief from local utility companies.

In compliance with the request of the Congress and of the Department of the Interior, the cooperatives have been endeavoring to work out equitable exchange agreements with neighboring utility companies, but have so far been unsuccessful. These companies have traditionally been unfriendly to the rural electrification program in the Southwest, especially with respect to the operation of REA financed generation and transmission systems. They have fought the co-ops not only in the courts, but before Congress. For this reason alone, it is unreasonable to expect the companies to enter into agreements with the cooperatives which would allow the G. and T.'s to continue as a competitive factor in the power production and transmission pattern of the area.

In addition, the entire systems of the generation and transmission cooperatives, including both the steam electric stations and the high-voltage transmission system, were constructed in reliance on the original contracts with the Southwestern Power Administration, and were designed to implement the contracts. They were not designed to be integrated with existing utility companies in the area.

These G. and T. cooperatives are on the brink of bankruptcy solely as the result of the Government's failure to perform under the 1950 contracts.

The cooperatives have, for 2 years now, bargained in good faith with electric utility companies in their vicinity in an attempt to work out alternative plans.

It now appears, however, practically impossible to solve the problem in any other manner than by reactivation of the original contracts.

During his testimony of May 5 and 6, Mr. Wright, the SPA Administrator, testified before the House subcommittee that the only thing necessary to reactivate these contracts would be a congressional appropriation of funds. An appropriation is not necessary if the use of SPA's continuing fund is reauthorized for use for purchase of thermal energy and payment of wheeling charges. Mr. Wright stated that due to the government's failure to perform during the past 2 years, the power marketing complex in the Southwest has changed, but despite this, he said that with a 5-year initial period of load building, these contracts would fully repay their cost to the Government within a 50-year period with interest. The power companies have not indicated they are or will soon be ready to execute power exchange agreements that would assure to the G. and T. systems equitable rates and operating conditions. The reactivation of the original contracts of 1950 will cost the Government nothing over the long run, and will, to a large extent, insure areawide integration of the Government's hydroelectric and the cooperatives' thermal generating facilities.

We, therefore, urge you, gentlemen of the subcommittee, to recommend that the Southwestern Power Administration be authorized to use its continuing fund up to a maximum of $6 million during fiscal 1956 for the purchase of firming energy and payment of wheeling charges. That is the amount in the bill as passed by the House, and it would enable SPA to perform its obligations to the generation and transmission cooperatives under the 1950 contracts.

THE SOUTHEASTERN POWER ADMINISTRATION AREA

Marketing stalemate costly to United States.—Mr. Chairman, the truth of the matter is that the rural electric systems in the Southeast are not getting the benefits to which they are entitled from the Federal hydroelectric projects now in operation, nor is the Government realizing power sales revenue commensurate with the power and energy being sold from the projects. There are two major projects in operation at the present time. They are the 204,000-kilowatt John H. Kerr project on the Roanoke River in Virginia and the 280,000-kilowatt Clark Hill Dam on the Savannah River forming the border between Georgia and South Carolina.

First let us study the situation at the John H. Kerr project. The project has a total dependable capacity of 180,000 kilowatts. It was initially determined by the Department of the Interior in marketing power from the project that half of its output would go to private utility companies and half to preference customers. It was further determined that two-thirds of the project would be marketed in the service area of the Virginia Electric & Power Co., and one-third in the territory served by the Carolina Power & Light Co. The outcome of these determinations brought about a formula by which 60,000 kilowatts of dependable capacity from the project would be made available for preference customers in Virginia, and 60,000 kilowatts of the dependable capacity would be made available to the Virginia Electric & Power Co. Thirty thousand kilowatts of the dependable capacity would be made available to preference customers in North Carolina, and 30,000 kilowatts available to the Carolina Power & Light Co.

Subsequent to appropriations by the Congress of sufficient funds to start a Federal transmission line from the Kerr Dam to Langley Field, Va., for service to the NACA Laboratory and to certain of the rural electric systems in Virginia, and after the rural electric cooperatives had obtained REA approval of a generation and transmission loan, the Virginia Electric & Power Co. agreed to wheel and firm for the account of the Government 60,000 kilowatts of power from the project allocated to preference customers in its service area. This contract has been in force for several years, and the cooperatives are now using practically the entire 60,000 kilowatts allocated to them in the VEPCO service area.

The VEPCO wheeling contract has enabled these cooperatives to save $316,998 since the initiation of service under it. The VEPCO cooperatives are paying an average of 6.81 mills per kilowatt-hour compared to a 7.5-mill rate which is the alternative source of power from the company. The power company in Virginia is taking its 60,000-kilowatt allocation from the project and the entire portion of the project's firm output allocated to Virginia is being sold at the anticipated rate of $10.80 per kilowatt-year plus 4.5 mills per kilowatt-hour for energy. We, therefore, urge appropriation of the full $925,000 requested by SEPA to perform under the VEPCO wheeling contract during fiscal year 1956.

North Carolina.—However, the situation is far different in North Carolina. Congress has never appropriated funds for construction of Federal transmission

facilities in North Carolina, and the Carolina Power & Light Co. has consistently fused to wheel and firm John H. Kerr project power for the account of the Government to the cooperatives and other preference customers in its service area. As a result, the Government has been unable to dispose of the John H. Kerr project power earmarked for North Carolina at firm power rates, and is being forced to dump this block of power to the Virginia Electric & Power Co. at 3 mills or less per kilowatt-hour at the busbar. This means that the Government is losing the full capacity charge and part of the energy charge on the entire block of power allocated to North Carolina. It represents an annual loss of revenue to the Federal Government of from $200,000 to $600,000 per year. The House committee report shows the total loss to date as $868,000. In addition to this lost revenue, the preference customers in North Carolina who are being denied power from the John H. Kerr project are losing an estimated $90,000 per year, based on the assumption that power from the project could also be made available to them at the same rate as is being paid by the Virginia co-ops. We think that this situation with respect to the marketing in North Carolina of John H. Kerr project power is one which deserves the attention of the Congress, and one which requires some direction from this subcommittee to the officials responsible for the marketing of this power.

Clark Hill.—The situation with respect to the marketing of power from Clark Hill Dam is somewhat analogous to that which exists at the Kerr project in Virginia. Dependable capacity at the Clark Hill project is 240,000 kilowatts. Initially the Department of the Interior decided to allocate half of the power from the project to South Carolina and half to Georgia. Because of the existence of the South Carolina Public Service Authority, and the Greenwood County Electric Power Commission of South Carolina, preference customers in South Carolina are obtaining an equitable portion of the benefits allocable from the project in that State. However, the Georgia Power Co. has up to now, like the Carolina Power & Light Co., flatly refused to wheel and firm Federal energy for the account of the Government to electric cooperatives and other preference customers. The cooperatives of Georgia have stood firm in their position that for Interior to permanently contract the entire Georgia portion of the Clark Hill project at the bus bar to the Georgia Power Co. would be illegal, under the Secretary's obligation to market in accordance with the preference principles in Federal power legislation.

Thus the Southeastern Power Administration, having no permanent market for the 120,000 kilowatt dependable capacity allocation of the project to Georgia, has been marketing on a month to month temporary basis to whatever utility in the area will pay the highest price. This has been going on for almost a year now, and practically all of the power from the project is being marketed in South Carolina. The Government is here, as at the Kerr project, getting no capacity charge on the 120,000 kilowatts of the project allocated to Georgia, which means the Government is receiving approximately from $200,000 to $1,000,000 per year less than the anticipated schedule of revenue would provide.

INTERIOR DEPARTMENT POWER MARKETING POLICIES HAVE FAILED IN SOUTHEAST

Our people from North Carolina and in Georgia have appeared before the subcommittees of the Congress for several years and asked that funds be appropriated for at least a minimum of Federal transmission construction program in these States to jar the power companies loose from their reactionary refusal to wheel power for the account of the Government in the same manner as have other power companies throughout the country. The Congress thus far has refused to appropriate any funds whatsoever for transmission facilities in North Carolina and in Georgia, and we think, to a large extent, has relied on the testimony of the Secretary of the Interior in this respect. Appearing before the House subcommittee considering Interior appropriations for fiscal 1954, February 24, 1953, Secretary of the Interior Douglas McKay stated at that time, over 2 years ago, that 1 of the 3 decisions on power which he had to make in his first few months in office and which, according to the Secretary, was a very controversial decision upon which his administration would stand or fall on the idea of power, was the Georgia Power Co. case.

Last year, on Thursday, January 21, 1954, the Secretary of the Interior again appeared before the Subcommittee on Interior Department Appropriations of the House of Representatives and in his prepared statement said his Department was not proposing construction of transmission facilities in the Southeast.

"It is believed that arrangements can be made in addition to those already made with private utility companies and preference customers for the disposal of

Government power in an economical manner in accordance with the preference provisions of law. * * * It is expected that long-term arrangements can be made for the disposal of this power through facilities of operating utilities in the area to mutual advantage of all concerned."

According to the best information available to us, the Department of the Interior has not signed one "long-term arrangement" for disposition of SEPA power since Secretary McKay took office.

Following this statement to the subcommittee last year, the Interior Department presented the cooperatives of Georgia with a permanent plan for the marketing of Clark Hill power which was nothing more than the original Georgia Power Co. plan of selling the entire Goergia portion of the project to the company at the bus bar in return for the company's promise to deliver a certain portion of the Clark Hill power to the preference customers who would remain customers of the company and subject to its operating practices and procedures.

The Interior Department proposal would have resulted in annual benefits to the company of about a million dollars compared with benefits to the preference customoers of some $100,000. The cooperatives have flatly rejected this plan, and there seems no immediate hope for settlement of the Clark Hill controversy unless the Congress makes it plain to the Department of the Interior and to the Georgia Power Co. that Clark Hill power must be marketed in accordance with traditional preference policies, and at a rate equal to that anticipated when the project was built.

We think that it is indeed regrettable that the Interior Department has again this year failed to request appropriations for construction of a minimum Federal transmission facility in North Carolina and Georgia which would give the Department the bargaining position it needs to arrange for permanent distribution of power and energy from the Kerr and Clark Hill projects in accordance with the duty imposed upon it by the Federal power policy.

The National Rural Electric Cooperative Association and the cooperatives of North Carolina and Georgia have steadfastly maintained that the Government would not be able to properly market the output of the project in the Southeast unless the backbone Federal transmission facility was constructed. They know from their experience with the marketing of power from the Allatoona project in Georgia, the output of which goes entirely to the Georgia Power Co. for the want of Federal transmission, that the present problem, which seems so perplexing to the Secretary, would arise.

It has now been 3 years since the Southeastern Power Administration requested transmission-line facilities or was given sufficient funds to conduct a comprehensive study of what lines would be required to integrate its projects and market the power therefrom in the most economical manner in accordance with law.

Nonpreference customers will get most power.—Preference customers in North Carolina and Georgia feel that the program of the Secretary of the Interior to market power from the Federal hydroelectric projects in the Southeast on a contractual basis with existing private utility companies has failed, and they think it is time the Congress undertakes active measures to insure that the situation is rectified. In addition to the two major projects already in operation—Clark Hill and John H. Kerr—the Southeastern Power Administration is also marketing lesser quantities of power from the Philpott project in Virginia and from the Allatoona project in Georgia.

The entire output of both of the latter two projects is being purchased by commercial utility companies without any benefits whatsoever flowing to the preference customers. Moreover, within the next few years, 86,000 kilowatts will be placed in service at the Buford project in Georgia and 30,000 kilowatts at the Jim Woodruff project on the Florida-Georgia-Alabama border. In addition the public-works appropriation bill for fiscal 1956 now contains $2 million to begin building the 130,000 kilowatt Fort Gaines Lock and Dam in Georgia. If an active program for marketing this power in a manner that will assure anticipated revenue return to the Government and benefits to preference customers is not pursued, the local utility companies will almost certainly absorb the entire output of each isolated project as it comes on the line.

A marketing study to put SEPA on business basis.—The preference customers in the Southeast feel the very least the Congress can do to bring some order out of this situation is to appropriate sufficient funds so that the Southeastern Power Administration may, at the direction of the Congress, conduct such studies as are necessary to determine what transmission facilities can be economically justified to integrate the various hydroelectric power-producing facilities in the area, and to bring an equitable portion of this power to preference customers in the area.

Any such study would, of course, be based on the premise that the Secretary's program of disposing of this power by contractual arrangements with existing commercial utility companies has failed, and that a Federal transmission program is necessary. We are asking, therefore, that this subcommittee recommend an appropriation of from $100,000 to $150,000, above the budget request, for SEPA and that the Congress direct that this money be used by the Southeastern Power Administration for the purpose outlined.

With the existing John H. Kerr and Clark Hill projects returning to the Treasury from $400,000 to $1,600,000 per year less than they should, and with the probability that other projects under construction will add to the difficulty within the next 5 years, we feel that it is high time that the marketing of power from Federal projects in the Southeast were put on a sound businesslike basis.

BUREAU OF RECLAMATION

Dams under construction.—The Bureau of Reclamation has requested, through the President's budget, and the House has approved the following appropriations for expenditure during fiscal 1956 on multiple-purpose projects from which power will be marketed by the Bureau.

Palisades project, Idaho, 114,000 kilowatts	$9,000,000
Yakima project, Washington (Chandler powerplant), 12,000 kilowatts	3,000,000
Glendo unit, Wyo.:	
Glendo, 24,000 kilowatts	6,000,000
Freemont Canyon, 48,000 kilowatts	

Transmission, Bureau of Reclamation.—The Bureau of Reclamation has also requested and the House approved the following appropriations for construction of power transmission facilities during the fiscal year 1956:

Colorado-Big Thompson project, Colorado	$2,100,000
Parker-Davis project, Arizona-California-Nevada	1,390,000
Fort Peck project, Montana-North Dakota	325,000
Missouri River Basin transmission	16,480,000

Including following lines:

Edgely, N. Dak.-Groton, S. Dak., 115 kilovolts.
Sioux Falls-Brookings, S. Dak., 115 kilovolts.
Brookings-Watertown, S. Dak., 115 kilovolts.
Watertown-Groton-Huron-Armour, S. Dak., 115 kilovolts.
Armour-Fort Randall-Gavins Point-Sioux Falls, S. Dak., 115 kilovolts.
Rapid City-Midland, S. Dak., 115 kilovolts.
Fort Randall-Oahe, S. Dak.-Mowbridge-Garrison, N. Dak., 230 kilovolts.
Fort Randall-Sioux City, Iowa, 230 kilovolts.
Oahe-Midland, S. Dak., 115 kilovolts.
Big Bend-Huron-Watertown, S. Dak.-Granite Falls, Minn., 230 kilovolts.
Bismarck-Devaul, N. Dak., 69 kilovolts.
Jamestown-Fargo, N. Dak., 230 kilovolts.
Fargo-Grand Forks, N. Dak., 115 kilovolts. (New start).
Alcova, Wyo.-Gering, Nebr., 115 kilovolts.
Alcova-Boysen-Lovell, Wyo., 115 kilovolts.
Sidney-Ogallala, Nebr., 115 kilovolts.
Casper, Wyo.-Gering, Nebr., 115 kilovolts.
Alcova-Freemont Canyon, Wyo., (double circuit, new start 115 kilovolts).
Lingle tap line, Wyoming:
Gavins Point-Belden, Nebr., 115 kilovolts.
Fort Randall-Neligh, Nebr., (new start) 115 kilovolts.

Most of these facilities represent a continuation of existing construction work. The rural electric systems support all of the Bureau of Reclamation appropriations requests we have listed, except for the Glendo unit and the Fort Randall-Neligh line, which items, we feel, should be modified.

Glendo unit.—Under a normal construction schedule, the Glendo Dam will be completed by 1958. The cooperatives in the western division, Missouri River Basin, have been told by the Bureau of Reclamation that the Bureau cannot meet

their firm loads beyond 1956 or 1957. We are told by the Bureau of Reclamation and the Bureau testified before the House subcommittee that the contractor can finish Glendo Dam by 1957—1 year ahead of schedule—if additional funds are made available for fiscal year 1956 construction. The overall cost of the project would not be increased and might well be reduced. Moreover, revenue to repay its cost would begin accruing a full year earlier.

We urge the subcommittee to recommend the full amount required to complete Glendo by 1957.

Fort Randall-Neligh line.—We do not support the 115-kilovolt Fort Randall to Neligh line as presently programed by the Bureau of Reclamation and as approved by the House. Originally, the Bureau contemplated that there would be a 230-kilovolt transmission line from Fort Randall to Grand Island, Nebr., for the purpose of integrating the Nebraska public power system and the Bureau of Reclamation Missouri River dams. The plan for the Fort Randall, Nebr., line was revised and only a 115-kilovolt line to Neligh is now programed by the Bureau. This line, our people in Nebraska tell us, is insufficient to carry the load. Mr. John M. Clema, executive manager, Nebraska Rural Electric Association, has written me as follows:

"The Nebraska system now has a contract for 100,000 kilowatts of power; 40,000 comes over the Fort Randall-O'Neill line; 30,000 will come over the Gavins-Point-Belden line in the fall of 1955. An additional amount of 30,000 would come over the Fort Randall-Grand Island line, plus large amounts of secondary for irrigation in 1956, and additional power available in 1958–60.

"The two lines are not sufficient to carry amount of power for which now contracted.

"There will be additional amounts of power available from Gavins Point, Oahe, Big Bend in the future. It is some of this power that will also be available to Nebraska."

It is our understanding from a study conducted by the Nebraska Public Power system that the Fort Randall-Grand Island line is fully feasible.

We, therefore, urge that the 115-kilovolt Fort Randall-Neligh line be deleted from the appropriations recommended by this subcommittee, and that funds be substituted for a 230-kilovolt line from Fort Randall to Grand Island.

Fargo-Grand Forks line.—The Fargo to Grand Forks, N. Dak., 115-kilovolt transmission line which is programed as a new start for fiscal 1956, and which has been approved by the House, will furnish Bureau of Reclamation service to the Minnkota Power Cooperative at Grand Forks, N. Dak., which, in turn, serves, with its steam generating facilities and interconnections with the existing utility companies, 10 distribution cooperatives in North Dakota and Minnesota.

The Bureau of Reclamation has committed 50,000 kilowatts of firm power from the Missouri River plants to the Minnkota Cooperative, but without the transmission facility from Fargo to Grand Forks, this power cooperative would depend on its existing 69-kilovolt subtransmission facility between these 2 points for integration of Missouri River power with its existing steam electric generators at Grand Forks. In addition to this, the Minnkota system plans to wheel Bureau of Reclamation power for the account of the Government to municipalities northward and eastward to Grand Forks and needs the additional capacity of the Bureau facility between Fargo and Grand Forks to undertake this wheeling commitment.

Granite Falls-Fargo line.—For many years, our people from western Minnesota and eastern North Dakota have appeared before the subcommittee and requested appropriations for completion of what has become known as the western Minnesota loop. There is under construction a 230-kilovolt transmission facility from Oahe through Huron and Watertown, S. Dak., into Granite Falls, Minn. It is contemplated that at Granite Falls, Missouri River power would be picked up by private utility companies for wheeling to preference customers in western Minnesota. The private utility companies, the rural electric cooperatives and municipalities of western Minnesota have, for 3 successive years, requested that the Congress appropriate funds for a line northward from Granite Falls through Fergus Falls and Benson, Minn., and then westward into Fargo, N. Dak., thereby completing a Bureau of Reclamation transmission loop through western Minnesota. There are a number of reasons upon which this request is based. The Bureau substations at Granite Falls and at Fargo, N. Dak., each of which will supply a substantial block of firm power to preference customers and private utility companies, are located at the end of long radial transmission lines, which means that any interruption along the several hundred mile length of either line would mean an outage to all systems served from the end of it.

Were the loop completed from Granite Falls to Fargo, all of the Bureau customers connected to either of these lines would be assured of continuous service since service continuity could be maintained during a break at either end of the loop.

In addition, the Granite Falls to Fargo transmission line would provide a second interconnection between the Bureau of Reclamation's transmission systems in North and South Dakota, and would enable the Bureau to dispose of secondary and dump energy through private utility companies in Minnesota which control large blocks of steam electric capacity. The House committee has recommended that $25,000 of the $16,480,000 approved for Missouri Basin transmission facilities be used by the Bureau to study a line from Granite Falls to Benson, Minn. This would be part of the Granite Falls-Fargo line we are requesting and we appreciate the recognition by the House committee of the need for this line. We feel, however, that $25,000 is completely insufficient to even plan the proposed Granite Falls-Benson line. We urge the subcommittee to recommend a minimum of $500,000 to really get this facility underway.

Fort Peck-Garrison line.—There is one other transmission facility which we believe is required for integrated operation of the Bureau of Reclamation's Missouri River system, and which is not included in the President's budget. This is a 230-kilovolt transmission facility between the existing 85,000-kilowatt Fort Peck plant in Montana and the 240,000-kilowatt Garrison plant in North Dakota nearing completion. To understand the significance of this line, it is necessary to discuss the overall picture of power marketing from Bureau of Reclamation facilities in the Missouri River Basin area.

For power marketing purposes, the Bureau of Reclamation has divided the Missouri River Basin into three functional areas. First, there is the western division of the Missouri River Basin comprising eastern Wyoming, Colorado, and western Nebraska.

Second, there is the eastern area of the eastern division of the Missouri River Basin system, including eastern Nebraska, western Iowa, and Minnesota, and all of North and South Dakota. Third, there is the western area of the eastern division of the Missouri River Basin system embodying largely the State of Montana. The eastern area of the eastern division and the western division of the Missouri River Basin system are areas in which there is a very limited availability of firm Federal power. In the western division, the Bureau has told the preference customers that it cannot supply their firm power requirements beyond 1956, or possibly 1957. In the eastern area of the eastern division, the Bureau has allocated quantities of power from the Missouri River dams that will satisfy preference customers requirements only until 1957 or 1958.

Last year, when the Bureau of Reclamation announced the availability in the eastern area of the eastern division of 531,000 kilowatts of firm power, the preference customers applied for 761,827 kilowatts, which indicates a very substantial shortage of firm power from the Federal plants in that area.

Thus, in the eastern area of the eastern division and in the western division of the Missouri River Basin system, there is need for additional blocks of firm power from the Federal system. This additional firm power would be marketed at the full firm-power rate of approximately 5.5 mills in the eastern area of the eastern division and 7.2 mills in the western division.

By contrast with these two areas of scarcity, the Bureau is faced with a surplus of firm power in the State of Montana which is in the western area of the eastern division system. The 50,000 kilowatt Canyon Ferry project in western Montana is one of the Bureau's newest powerplants. There is no transmission system associated with this Canyon Ferry plant except for a short tie line interconnecting it with the Montana Power Co. The rate for firm energy from this Canyon Ferry project is 5.5 mills and for nonfirm energy, 3 mills. However, because of the lack of market for firm power in the vicinity of the Canyon Ferry project, 89 percent of the total output of the project was sold to the Montana Power Co. at a 2.5 mill dump energy rate during the year 1954. In addition, the Montana Power Co. is buying large quantities of energy from the Fort Peck project at 2.5 mills per kilowatt-hour, which is also a dump rate. We have, in our files, output curves of the Canyon Ferry project for a typical 5-week period which show that the project is being operated in a manner to produce firm power which is being sold to the Montana Power Co. at 2.5 mills per kilowatt-hour. We calculate that this is costing the Government approximately $626,800 per year in lost revenue from this project.

It is our belief that if a 230-kilovolt transmission line from Fort Peck to Garrison were constructed by the Bureau of Reclamation, Fort Peck power now being

used to serve the firms loads in northern Montana could be transmitted eastward to serve the power-scarce area of the Dakotas. Canyon Ferry power now being sold at a 2.5-mill dump rate could be displaced northward to meet firm loads in Montana now being supplied from the Fort Peck project. We feel that the 230-kilovolt transmission line from Fort Peck to Garrison would assure the Government of increased power sales revenue from the Fort Peck and Canyon Ferry plants, and would simultaneously serve to alleviate the Federal power scarcity in the Dakotas and eastern Nebraska. This line would also serve to market power from the second 80,000 kilowatt Fort Peck powerplant now in the final stage of planning by the Corps of Engineers.

We, therefore, urge the subcommittee to consider an initial appropriation for construction of a 230-kilovolt transmission line from Fort Peck to Garrison, N. Dak. This line would increase power sales revenue and make firm power available where it is needed, in the Eastern Division, Missouri River Basin.

Yellowtail Dam.—To relieve the impending shortage of Federal power in the western area of the Missouri River Basin system, we are urging immediate construction of the Yellowtail Dam in southern Montana. As the subcommittee is well aware, the Bureau of Reclamation originally asked for $9 million to begin this project during fiscal 1956, but the project was deleted by the Bureau of the Budget on the ground that to assure repayment of the power investment in Yellowtail, the rates for power sold from the project would necessarily exceed that prevailing in the area, and because the possibility of local participation, presumably by a power company, construction of the project had not been fully explored. We appeared before the Subcommittee on Irrigation and Reclamation of the Senate Committee on Interior and Insular Affairs several weeks ago, and presented detailed testimony which we feel fully refuted the charge with respect to payout of the project. We are convinced that the Yellowtail project is fully feasible, and that the Bureau of Reclamation has used extremely conservative procedures in calculating the power payout and the benefit-to-cost ratio of the project. However, if the Bureau of Reclamation is to be forced by the Bureau of the Budget to assume the entire burden for obtaining power company approval for each new start on a powerplant in this area, there is virtually no way of building additional Federal power projects without power-company approval.

Over a year ago, the Montana Power Co. of Butte, Mont., stated that it was "prepared to investigate a partnership arrangement with the Government for the development of power if the project (Yellowtail) should be approved for construction." Up until March 23, 1955, the company had made no overtures to the Department of the Interior with respect to participating in the construction of this project. At the March 1955 hearings, the Montana Power Co. and the Pacific Power & Light Co. asked that they be given further time, and that no appropriations be made until they had been subsequently heard from. At those hearings, the companies promised to submit a preliminary report by May 1 to the Secretary of the Interior concerning their intent to participate in construction of Yellowtail project. On May 3, 1955, the companies wrote to Undersecretary Davis, stating that they were considering the possibility of contributing about $21 million toward the cost of the $133,703,600 project. For this contribution, the companies would expect to purchase falling water after the Government built the dam. The Government would bear the full cost of the irrigation, and flood-control features. We are opposed to such a plan which diverts the most profitable features of multiple-purpose projects to commercial utility companies. We urge that this subcommittee recommend funds to immediately begin construction by the Bureau of Reclamation of Yellowtail Dam as authorized.

High level operation of Garrison Dam.—Mr. Chairman, before leaving the complex situation of the Missouri River Basin system, I would like to point out that several weeks ago, we appeared before another panel of this subcommittee to support 1,850-foot pool level operation of the Garrison Reservoir in North Dakota. At that time, the Governors of North and South Dakota and Nebreaska as well as rural electric representatives from the affected area, appeared and gave adequate testimony with respect to the wishes of the rural electric systems of these States that the permissible operational level of the Garrison Reservoir not be restricted below the 1,850-foot level. At this time, I would only like to reiterate the position of the National Rural Electric Cooperative Association, which is in full support of 1,850-foot operation of the Garrison project.

Restrictive language.—Mr. Chairman, we are very concerned with the implications of the following language, to which all Bureau of Reclamation appropriations for the fiscal year 1956 would apparently be subject. The language has appeared in Interior Department appropriation bills for several years. It appears in the

bill for fiscal year 1956 and on page 761 of the budget of the United States Government for the fiscal year ending June 30, 1956. It reads as follows:

"*Provided, further,* That no part of this appropriation shall be used to initiate the construction of transmission facilities within those areas covered by power wheeling service contracts which include provision for service to Federal establishments and preferred customers, except those transmission facilities for which construction funds have been heretofore appropriated, those facilities which are necessary to carry out the terms of such contracts or those facilities for which the Secretary of the Interior finds the wheeling agency is unable or unwilling to provide for the integration of Federal projects or for service to a Federal establishment or preferred customer."

Mr. Chairman, we do not understand the full significance of such restrictive language placed in the budget by the executive department of the Government itself. Taken at its face value, the language would prevent the Secretary of the Interior, where a wheeling contract is in force, from constructing any new transmission lines whatsoever without first obtaining effective approval from the utility company already operating in the area.

We think that the language, standing alone, and undefined as it is, is a real threat to the entire future of the Federal power program.

THE BONNEVILLE POWER ADMINISTRATION AREA

Bonneville transmission.—For construction during fiscal 1956, the Bonneville Power Administration requested $15,353,000. The House cut this figure to $14,600,000. However, we understand that Bonneville will be able to absorb the cut without endangering its construction program. As has been the case for several years, the Bonneville construction program does not involve extension of its service area. The money will be completely used on the construction of main grid 230-kilovolt facilities for the integration of Chief Joseph, The Dalles, and other hydroelectric projects nearing completion. The remaining funds will be used for heavying up customer service facilities in the entire Bonneville service area. In some cases, loads are growing as much as 25 percent a year, and it has been frequently necessary for Bonneville to practically double its 115-kilovolt customer service facilities in many areas.

We urge the subcommittee to not impose any further cuts on the Bonneville construction activities for the fiscal year 1956.

BONNEVILLE OPERATION AND MAINTENANCE

The budget request for Bonneville operation and maintenance is $6,650,000. The House cut this item to $6,500,000 without specifying where the cut is to be applied. We understand that Bonneville would have to apply this cut to system operation and maintenance. It is vitally important to the whole Pacific Northwest that the Federal system be operated in a continuously reliable fashion. We urge that the subcommittee recommend full restoration of this $150,000 cut.

SUMMARY

Mr. Chairman, the development of the rural electrification program throughout much of the United States depends on a vigorous Federal power development and marketing program.

Southeast.—Rural electric systems in the Southeast are asking for an appropriation of $100,000 to $150,000 for the purpose of instituting an areawide Federal power marketing survey based on the premise that the plan of the Secretary of the Interior for marketing Federal power through contractual arrangements with private utility companies has produced no results, as borne out by the marketing stalemate at the Clark Hill and John H. Kerr Dams, which is costing the Government, we estimate, between $400,000 and $1,600,000 per year in lost revenue. The rural electric cooperatives in North Carolina and Georgia which are entitled to benefits in these two projects are not getting them.

Southwest.—We ask that the committee recommend the House approved figure of $6 million to be available from the SPA continuing fund during fiscal 1956 for reactivating of the 1950 contracts between the Southwestern Power Administration and the generation and transmission cooperatives. These contracts have been declared lawful, and the G.-T. cooperatives which relied on them face bankruptcy as a result of the Government's failure to perform.

Bureau of Reclamation Area.—In the area served by the Bureau of Reclamation's Missouri River Basin transmission system, we urge that the original appropriation

of 89 million requested by the Bureau of Reclamation to begin construction of the Yellowtail Dam be recommended by the committee. We further urge that funds for the proposed 115-kilovolt transmission line from Fort Randall to Neligh, Nebr., be deleted by the committee from the recommendations of the Department of the Interior, and that there be substituted therefor funds to begin construction of a 230-kilovolt transmission line from Fort Randall to Grand Island, Nebr., as was originally planned by the Bureau of Reclamation.

We recommend construction of a 230-kilovolt transmission line between the Fort Peck and Garrison powerplants for the purpose of relieving the shortage of Federal power in North and South Dakota and simultaneously assuring the Bureau of Reclamation of increased revenue from Canyon Ferry powerplant energy, 89 percent of which is now being sold at dump rates.

We also recommend the full amount requested in the budget, and approved by the House, for the Fargo to Grand Forks, N. Dak. transmission line, and that funds be appropriated to begin construction of a transmission line from Granite Falls, Minn. to Fargo, N. Dak.

We further recommend that the $6 million item for the Glendo Dam be increased to provide completion of the project in 1957—1 year ahead of schedule. We understand this can be done without increasing the projects overall cost.

Bonneville Power Administration.—We recommend that the $150,000 cut imposed by the House on BPA operation and maintenance funds be restored.

Finally, Mr. Chairman, I would like permission to have reproduced in the record, copies of resolution adopted by the membership of the National Rural Electric Cooperative Association in support of some of the various projects we have outlined in this statement.

RESOLUTIONS ADOPTED BY THE 13TH ANNUAL MEETING OF THE NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, ATLANTIC CITY, N. J., FEBRUARY 17, 1955

RESOLUTION NO. 5–G

Whereas there are a great number of hydroelectric projects throughout the United States for the development of low cost electric power; and

Whereas these projects are needed to meet the requirements for electric power in the Nation; and

Whereas there is a need for the acceleration of the program of conservation and control of our rivers for power, irrigation, flood control, and other benefits which are essential for the prosperity of the Nation: Now, therefore, be it

Resolved, That we urge Congress to appropriate necessary funds for planning and constructing multipurpose hydro projects meeting the standards laid down for feasible multipurpose dam construction, and by way of illustration, including the following dams among others: Jim Woodruff, Niagara, Big Bend-Missouri River Basin, Oahe, Glendo, Yellow Tail, Fryingpan-Arkansas, Table Rock, Keystone, McGee Bend, Greers Ferry, Eufala, Hells Canyon, Ice Harbor, Libby, Hartwell, upper Columbia, Buford, Colorado River storage project, John Day, and Passamaquoddy; and be it further

Resolved, That Congress enact the necessary legislation to assure the people that development of hydroelectric sites solely for power production purposes, by commercial utilities, or non-Federal agencies may be undertaken only when such development will not interfere with ultimate comprehensive river basin development, which because of size and complexity of purpose should be properly undertaken by Federal agencies; and be it further

Resolved, That we urgently request Congress to appropriate necessary funds for transmission facilities to integrate river basin project power facilities, and delivery of power to the load centers of preference customers; and be it further

Resolved, That rights of preference customers, under the Flood Control Act of 1944, be recognized, and that preference customers be advised that power is available and their needs met before contracts or interim agreements are made with commercial utilities for disposal of power from various power projects.

RESOLUTION NO. 5–K

Whereas the rural electric cooperative and municipal systems in the Southeastern Power Administration area are entitled to preference in the sale of electric power and energy from Clark Hill, Jim Woodruff, and Kerr Dams; and

Whereas the only truly satisfactory method of carrying out the preference provisions of the law is through the delivery of such power and energy by South-

eastern Power Administration to the load centers in the service area of its preference customers: Now, therefore, be it

Resolved, That we urge the Secretary of the Interior to request and the Congress to appropriate the necessary funds for the construction of transmission lines from Clark Hill, Jim Woodruff, and Kerr Dams to the load centers in the service areas of the preference customers in the Southeastern Power area; and we further urge that, pending the construction of such transmission lines from Clark Hill Dam, that the Southeastern Power Administration sell the output of said dam to the rural electric cooperatives of Georgia in accordance with the proposal of the Georgia cooperatives.

RESOLUTION NO. 5–N

Whereas the Department of the Interior through its Bureau of Reclamation is now marketing power from Corps of Engineers' hydroelectric projects on the Missouri River and power available for marketing will be greatly increased in the near future; and

Whereas much of the power is being marketed under firm power contracts; and

Whereas firm power deliveries not only obligate the seller to maintain reasonable reserves of generating facilities and water resources but also adequate transmission facilities to make firm power sales at the far end reasonably firm; and

Whereas the industry does not consider firm deliveries of the magnitude contemplated by the Bureau as being firm if such deliveries are made from long radial transmission lines such as are being contemplated at Granite Falls, Minn., and at Fargo, N. Dak.; and

Whereas both western Minnesota and eastern North Dakota stand to receive second-class firm-power service until these eastern terminals of the Bureau's high-voltage lines are looped—in the meantime, these customers will be paying the standard Bureau firm-power rates; and

Whereas the full value of the 230,000-volt line from Bismarck to Jamestown to Fargo will not be realized and eastern North Dakota will not be adequately looped until this 230,000-volt line is continued to Granite Falls, extending from Fargo to Grand Forks, and the 115,000-volt line is completed from Lakota to Grand Forks: Now, therefore, be it

Resolved, That we urge that the Department of the Interior make early plans for the construction of the 230,000-volt transmission line from Fargo, N. Dak., to Granite Falls, Minn., and that funds for such facilities be placed in the Department of the Interior's 1956 budget; and it is further

Resolved, That the construction of the Bureau's transmission lines from Fargo to Grand Forks and from Grand Forks to Lakota be given serious consideration as part of the Bureau of Reclamation's early plans for the orderly fulfillment of its obligations as a firm power supplier in eastern North Dakota.

RESOLUTION NO. 5–O

Whereas the Southwestern Power Administration and Southeastern Power Administration have been dependent upon yearly appropriations to carry out their contracts with the G. and T. cooperatives and power companies in their operating areas; and

Whereas such plans by Congress to provide money on a yearly basis cover too short a period of time and are subject to interruptions, thereby making it impossible for SPA, SEPA, the G. and T. cooperatives and power companies to carry out their contracts on a businesslike basis: Now, therefore, be it

Resolved, That Congress provide revolving funds for the Southwestern Power Administration and Southeastern Power Administration specifically for the purpose of buying from and exchanging electric power and energy with the G. and T. cooperatives and power companies.

GENERAL STATEMENT

Chairman HAYDEN. The committee can be here for about 15 minutes. If you can divide your time up among the witnesses, we would be glad to hear you. Who is the first witness?

Mr. FAIN. Mr. Chairman, we have a presentation here from the southeast area on some of the problems there that I doubt could be

covered in 15 minutes. If the chairman wishes us to come back at a later hour, it would be certainly satisfactory with us.

Chairman HAYDEN. You were notified that you would have 15 or 20 minutes before the committee, and we cannot take an hour or two.

Mr. FAIN. No, sir; certainly we would not want to take that much.

Senator ELLENDER. I wonder if you have anything new? We have been hearing you from year to year.

Mr. FAIN. We have something new on the southeast situation, Senator. If the Chair wishes, we will certainly try to present that in the 15 minutes.

Chairman HAYDEN. Who is your first witness?

Mr. FAIN. Mr. Ward, the president of the Tarheel Electric Membership Corp.

TARHEEL ELECTRIC MEMBERSHIP ASSOCIATION, ROSE HILL, N. C.

STATEMENT OF J. A. WARD, PRESIDENT

GENERAL STATEMENT

Mr. WARD. Mr. Chairman, gentlemen of the committee, I am J. A. Ward. I reside in Rose Hill, N. C. I am a member of—and serve as the secretary-treasurer of—Four County Electric Membership Corp., whose headquarters are in Burgaw, N. C. I am also the president of Tarheel Electric Membership Association. Tarheel Electric is the trade-service organization representing 28 of North Carolina's 32 electric membership corporations, which serve electricity to some 170,000 rural families.

We have with us today Mr. Alton P. Wall, who is manager of Randolph Electric Membership Corp., at Asheboro, N. C., and is president of Eastern North Carolina Electric Membership Corp. Eastern Electric is the wholesale power procurement agency representing 17 of the same cooperatives represented by Tarheel Electric.

We also have with us Mr. J. L. Shearon, manager of the Wake Electric Membership Corp. at Wake Forest, N. C., and secretary-treasurer of Tarheel Electric. Mr. Shearon, is also a member of the executive committee of Eastern Electric.

Present also is Mr. T. Foley Treadway, an electrical engineer of the Southern Engineering Co., of Atlanta, Ga. This firm is retained by Eastern Electric for professional services, and Mr. Treadway, on behalf of Eastern Electric, will answer such questions as you may wish to propound to him, concerning the problem we are here to discuss with you. Also with us is Mr. William T. Crisp, the executive manager and general counsel of Tarheel Electric. Mr. Crisp will present the basic testimony which we have come here to offer for your consideration.

Before presenting Mr. Crisp to you, we think it appropriate for this subcommittee to know what has taken place in North Carolina since Mr. Crisp testified before the House Appropriations Subcommittee on Public Works on May 19–20. As a result of that testimony, both he and Mr. Treadway—though the latter gave no testimony whatever on our behalf—have been labeled by the Carolina Power & Light Co. as "public power advocates." In addition, this power company has charged that Mr. Crisp hasn't told the truth in connection with the

company's failure to wheel Buggs Island power to our systems in North Carolina. The company also charged that Mr. Treadway was interested in the construction of a Government transmission line into North Carolina because Southern Engineering Co. would profit if such a line were built, a charge ridiculous on its face, since this firm's fees are in no way dependent upon the outcome of this matter and since such a line, if built at all, would be engineered by the Government's own engineering staff.

We wish to make this perfectly clear. We have a great deal of respect for the utility company and their officials. We think these officials, in general, do very well the job for which they are hired—which is to make money for their stockholders. It is unfortunately true, however, that in the Kerr project controversy, one of these utilities—the Carolina Power & Light Co.—seeks to serve its own interests, not only at the expense of our rural electric cooperatives and the farmers which they serve, but the law itself.

We need not remind this subcommittee that the present condition of the farmer is not enviable. Labor income in general is at or near its highest peak in history. Big business, including particularly the electric utility companies, is earnings handsome profits. The various regulatory commissions virtually guarantee such profits to utilities such as Carolina Power & Light Co. But, Mr. Chairman, farm income has not been going steadily down, but the farmers' costs have been going steadily up.

At the Federal Government's John H. Kerr Dam in Virginia, there are 60,000 kilowatts of cheaper wholesale power which, under the law, our farmers are entitled to buy. The Department of the Interior is charged with the responsibility of selling and delivering that power to those farmers. If our farmers could only buy this power they could reduce considerably one cost involved in their farming operations. We have been trying to get this power for more than 2 years without success. We wish to register before this subcommittee not only our sincere request that it helps to solve this problem, but also a most vigorous protest that the Carolina Power & Light Co. has seen fit, through vicious advertising and press releases, to discredit our efforts to that effect, to unjustly label our spokesmen, and to confuse both the public and our own farm people as to what the issues in this matter actually are. We think it ill behooves the Carolina Power & Light Co. to spend money on advertising designed to disparage the efforts of our farm people to better their economic conditions through cheaper electricity. We think this advertising by the company is especially deplorable in that it is being paid for, not by the company stockholders, but by the company's own rate payers, of which ironically these same farm people are a sizable group.

We are placing all these advertisements in your hands today, together with information correcting them and setting the record straight. It is not our purpose to go into all the implications contained in these and other unfair, misleading, and incorrect statements which the company has made.

It is our specific purpose, however, to introduce Mr. Crisp as our spokesman today and proudly to qualify him as such with these words: His integrity and professional ability are above reproach; when he speaks he will speak—as on past occasions—for all our mem-

ber systems in North Carolina, and in strict accordance with their views and policies.

I am also authorized to say that the views and policies of Eastern North Carolina Electric, the G. and T. cooperative already referred to, are being given in Mr. Crisp's testimony.

We appreciate this opportunity to present information relative to a most perplexing problem. We most respectfully and earnestly solicit your help in gaining cheaper electricity for the farm people in North Carolina. A source of cheaper electricity has been available for a long time. Under the law, we are entitled to buy it. All we ask is that we be enabled to exercise our rights under the law.

Chairman HAYDEN. Thank you for your statement. We will be glad to hear from Mr. Crisp.

TARHEEL ELECTRIC MEMBERSHIP ASSOCIATION, INC.

STATEMENT OF WILLIAM T. CRISP, EXECUTIVE MANAGER AND GENERAL COUNSEL

PREPARED STATEMENT

Mr. CRISP. Mr. Chairman, I know that your time is limited, and I shall not read this statement.

Chairman HAYDEN. It will be inserted in the record.

(The statement referred to follows:)

STATEMENT OF WILLIAM T. CRISP, EXECUTIVE MANAGER AND GENERAL COUNSEL OF TARHEEL ELECTRIC MEMBERSHIP ASSOCIATION

Mr. Chairman, members of the subcommittee, my name is William T. Crisp. I am the executive manager and general counsel of Tarheel Electric Membership Association, Inc. Tarheel Electric is the trade-service organization representing 28 of North Carolina's 32 electric membership corporations, which serve electricity to 170,000 consumer-member families. I am authorized to state that this testimony is offered also on behlaf of Eastern North Carolina Electric Membership Corp., the wholesale power procurement agent representing 17 of the same cooperatives.

On behalf of both these corporations, we wish first to thank the subcommittee for permitting us to testify at this hearing.

We have but one reason for giving testimony: 14 of our cooperatives in North Carolina have long endeavored to purchase wholesale power from the John H. Kerr Dam just across the North Carolina line in Virginia. We respectfully request this subcommittee to help us achieve this objective.

We could not be honest with the Congress unless we stated in the beginning that we have thus far been quite frustrated and most discouraged in our efforts to buy this power. We say this despite the fact that the events of the past month have made it appear our efforts may at long last succeed. A brief résumé of the history of these efforts to date is, we think, in order:

Under section 5 of the Flood Control Act of 1944 (16 U. S. C. A. 825S), we are entitled, as preference agencies, to purchase the power generated at Kerr project. Also under section 5, it is the responsibility of the Secretary of the Interior to deliver—or to make suitable arrangements effecting the delivery of—this power to us.

Several years before the John H. Kerr Dam was completed, our cooperatives notified the Secretary of the Interior that they desired to purchase power from the project when it became available and requested him to effectuate means whereby such purchase could be accomplished.

In 1951 an administration budget request for funds—with which to construct a self-liquidating transmission line from the project to our load centers in North Carolina—was turned down by the Congress. The Senate that year did appropriate the sum of $23,520 to finance a preliminary study of the feasibility of such a transmission line. The House of Representatives rejected even this item.

We think this subcommittee should note carefully a part of the testimony that it heard that year (in connection with H. R. 3790, which would have authorized the above-mentioned transmission line). Appearing in opposition to the proposed transmission line was, among others, the Carolina Power & Light Co., in whose service area the preference customers for which we speak here today are located. This company, through its official spokesman and president, L. V. Sutton, had the following exchange with Senator Hayden, as recorded on page 1022 of the official record:

"Senator HAYDEN. What is the difference between your situation and that in Oklahoma or Arkansas or southern Missouri and other places, or in the Far West, wherein the private power companies have found it to their advantage to agree that they will help carry out the public-power policy of the Government; that is, to make available any power generated at these hydroelectric dams to preferred customers of the Government, the co-ops, the municipalities, or to the Government itself, at the lowest possible rates consistent with good business principles? They have agreed in these wheeling agreements to do that very thing and have found it advantageous to do it, because, by integrating the hydropower with their steam power, they save money on steam generation. You say this high-cost coal is involved. It would certainly be possible to integrate the Buggs Island power, fluctuating as it is, into your system in an advantageous way; is that not true?

"Mr. SUTTON. I think that could be worked out. We would be glad to do that.

"Senator HAYDEN. Then, if you can do it, as in the West, it is simply a question of how much you should be paid for wheeling it from Buggs Island to these preferred customers of the Government. What is your objection to doing that?

Further along in the hearing, as recorded on page 1024 of the record, the following exchange took place between Mr. Sutton and Senator Ellender:

"Mr. SUTTON. We will be glad to work out something of that kind."

"Senator ELLENDER. It strikes me, Mr. Sutton, the amount of power that is to be developed from Federal funds is so small in contrast to what is going to be used in that area, that it should not take you long to contract with them to get rid of it. It would be to your advantage. If you can get more of this overflow over your lines and distribute that, it will reduce your cost.

"Mr. SUTTON. Did you mean from generating stations, or are you referring to transmitting lines?

"Senator ELLENDER. Let us take Buggs Island. There is a certain peak load to sell. In order to feed customers a constant stream of electricity, it may become necessary to firm that. That is what it amounts to. It strikes me the amount of electricity generated there is so small in contrast to what is produced in this entire area, you should want to do that thereby, you would prevent further expansion on the part of the Government to take any steps to firm that power.

"Mr. SUTTON. With respect to firming the power, we will be glad to get together with them on a basis of that kind. I cannot see the transmission lines will help firming the power."

By the foregoing testimony, together with other pertinent testimony given by the same witness on the same day, we think Mr. Sutton indicated quite clearly the willingness of his company not only to wheel this power to the cooperatives, but to sell the Government firming steam in order to make steadily available the kilowatts in Kerr project. There is every reason to believe that this testimony by the company had some influence on the Congress in rejecting the proposed transmission line in 1951.

Again, in 1952 (H. R. 7176), the administration—for the last time to date—requested transmission line funds in the budget covering the fiscal year 1953. Again, the Carolina Power & Light Co., through the same spokesman, appeared before this subcommittee in opposition to that request. We think this subcommittee should also take note of a part of the testimony given by Mr. Sutton on that occasion. It appears on pages 1123 and 1124 of the official record:

"Senator HAYDEN. There are two types of preferred customers with the Government in that area; one, the rural electric cooperatives, and you are willing to see that they get the benefit of cheap power; the other type would be a municipality which has its own power system. Are there many of those?

"Mr. SUTTON. There is a number of those. I might mention here, which I think is of interest, a fact regarding Rocky Mount and Wilson and Farmville and Washington and Greenville. Our company and the Virginia Electric & Power have made contracts with them to serve them, even though at the time SEPA had a representative there, and they refused them or preferred to sign up with us for periods of 20 years and 10 years, rather than sign up with SEPA.

"One of the main reasons is that if they become signed up with SEPA, SEPA tells them what rate they shall charge and how they shall conduct their business. We sell them at our published rate, and they can run their business how they please and charge what rates they please. Danville, Va., is an ourstanding example. It is right within the shadow of Buggs Island. They had negotiations with SEPA and refused to sign up and placed an order for a steam turbine. In other words, they preferred to make their own power, even though it might cost more, rather than to sign up and become customers of SEPA and have SEPA tell them how they should run their business.

"Senator HAYDEN. In case some municipality where you are now serving the customers directly decided to go municipal what happens then?

"Mr. SUTTON. You mean if we have a town like Henderson where we have a franchise and are doing a distribution business?

"Senator HAYDEN. Yes.

"Mr. SUTTON. Since we have a franchise, and are doing a distribution business, we do not consider them a municipality, and we do not expect to turn that over to the Government. Otherwise, we would be put out of business.

"Senator HAYDEN. I understand you do not want to give up your customers. But the point I am getting at is that these franchises expire.

"Mr. SUTTON. That is right.

"Senator HAYDEN. And there are cities where a private utility has a franchise with an expiration date, and when that expires, they vote that they are going to generate their own power. What would be the status of a city of that kind?

"Mr. SUTTON. If we could not convince them it is to their interest to continue with us, I think we would follow the plan that we proposed before you last year, that we would still want to keep them as our customers, but we would buy the Government power at the dam, transmit it without profit, at cost, and deliver them what they wanted.

"Senator HAYDEN. Your procedure would be somewhat different with respect to municipalities and rural electric cooperatives?

"Mr. SUTTON. Yes; for this reason; we feel the rural cooperative is like a part of the Government. Therefore, if the Government wants to take them over or run them and the cooperatives want to have SEPA be their power supplier and become their customer, that is all right. We have agreed that we will wheel for them. But we have not agreed to that on the other. But these municipal towns that we have taken in recently we have told them that we would arrange to do that for them. I am going to mention later about the towns we have worked with, these municipalities in eastern North Carolina."

By these statements, Mr. Sutton acknowledged that to wheel this power to us involved our becoming the customers of the Government. Note that Mr. Sutton did not agree to wheel power to the municipalities. Instead, he stated his intention to buy the power from the Government, transmit it, and then deliver it to the municipalities, which the company would keep as its customers.

In 1952 as in 1951 the administration's request for transmission funds was killed. Again, there is reason to believe that the company's promise to wheel this power to us had some influence on the Congress in rejecting this item.

That was over 3 years ago. Kerr project power has been available to our member systems for approximately 2 years; they are still not receiving one kilowatt from this dam.

We wish to call to the subcommittee's attention also the fact that, despite the long delay in this matter, the present administration has never requested one dime in transmission funds for this project.

This is not to state, however, that none of Buggs Island's power is going to cooperative preference customers. Quite the contrary: Of the project's 180,000 kilowatts of dependable capacity, 120,000 kilowatts are being sold—60,000 to the 12 Virginia and 5 North Carolina cooperatives located in the service area of the Virginia Electric & Power Co., and 60,000 to VEPCO itself for the services rendered by it in wheeling and firming this power. Under this arrangement—which was achieved in 1952—The Department of the Interior's marketing agent, Southeastern Power Administration, sells the power directly to, and is paid in return directly by, the preference customers; under a second separate contract, VEPCO firms this power and wheels it to the preference customers on behalf of the Government, and is paid by the Government for this service; and under a third, separate contract, VEPCO sells the cooperatives any power required by them in excess of the amount sold to them by the Government.

Prior to this arrangement, these cooperatives purchased all their wholesale power requirements from VEPCO at a rate of 7½ mills per kilowatt-hour plus a

slight minimum demand charge. Under the present arrangement, the cooperatives pay the Government 4½ mills per kilowatt-hour plus a 90 cents-per-kilowatt monthly demand charge. This arrangement has been beneficial to all three parties concerned:

The Government—on this two-thirds portion of the project's output—is realizing a return which recovers the Government's investment in the facilities involved.

The cooperatives, according to the latest report of Southeastern Power Administration, had realized, through May 1 of this year, a total of $371,385 in power cost savings—that is, up and above what they would have paid VEPCO under the prior contract with that company. We attach hereto as exhibit A an itemized breakdown showing the cooperatives' purchases and savings through February 28, 1955. We were furnished this breakdown by Southeastern Power Administration.

And VEPCO, too, is benefiting from this arrangement. The cheap hydropower which is incorporated into VEPCO's system by this arrangement results, by our estimates, in a saving to the company of approximately $1,200,000 per year (we base this estimate on what VEPCO saves by not having to generate a comparable amount of power through its steam generating facilities). Moreover, the company is of course paid for its wheeling and firming services.

We would remind this subcommittee, however, that the foregoing arrangement was never achieved until after the Government had authorized a transmission line to bring Kerr project power to a military installation at Langley Field, Va. Then, and not until then, did VEPCO agree to the foregoing arrangement. The Government, therefore, never found it necessary to construct the authorized line.

We think this subcommittee should review carefully what has happened to the remaining 60,000 kilowatts in the Kerr project:

Southeastern Power Administration, quite fairly we think, reserved those 60,000 kilowatts for sale to the North Carolina preference customers located in the service area of the Carolina Power & Light Co. and within economic transmission distance of the project. After long and fruitless waiting for the Government to make at least an active effort to deliver this power to us, representatives of our systems met here in Washington in May of 1954 and urged Assistant Secretary of the Interior Fred G. Aandahl to begin such an active effort.

Mr. Aandahl promised at that time that in June following he would initiate negotiations with the Carolina Power & Light Co., looking toward a satisfactory wheeling agreement. One joint meeting between the Department, the company and the cooperatives has since been held: That was on December 9, 1954.

At that time, consistent with our position from the beginning, we stated that there were two basic principles which, under section 5 of the Flood Control Act, must be honored: First, that we receive clear and unencumbered title to the power directly from the Government; and second, that we receive a fair share of the economic benefits, both now and in the future, represented by the 60,000 kilowatts available.

At this meeting the company submitted certain principles upon which it proposed to achieve an agreement. For all practical purposes, the arrangement contemplated by these principles was the same as Mr. Sutton had said he would enter into with respect to the municipalities in his cited testimony of 1952. Essentially, this arrangement called for the company to purchase the 60,000 kilowatts directly from the Government and then sell the cooperatives 30,000 firm kilowatts out of its own system. We rejected this proposal because it would not only violate the preference clause itself, but would assume to make available to our systems a wholesale power rate which, in our opinion, neither the Government nor the company could guarantee.

At the suggestion of Mr. Aandahl during the December 9 meeting, we agreed to submit copies of sample definitive contract documents incorporating the principles which we considered essential in such form as would, in our opinion, satisfy both the requirements of the law and the economic interests of all parties concerned. As had been previously stated to the Department of the Interior, we were willing to accept the VEPCO-SEPA-cooperative arrangement already referred to as the substantial basis for such contracts. We accordingly submitted, on February 18, 1955, contract proposals substantially based on that arrangement.

On March 22, 1955, we received from Mr. Aandahl a copy of the proposed principles which the company wished to become the basis for the arrangement. These principles had been slightly—but not materially—revised from their original wording as submitted to us at the December 9 meeting referred to.

A full analysis of all these proposals, prepared by the president, attorney and engineer of Eastern North Carolina Electric Membership Corporation and approved by the executive committees of both that corporation and Tarheel Electric, is hereto attached in the form of exhibit B.

In the meanwhile, the Government, due to its inability to market our portion of the Kerr project's output, has already lost over $868,000. This loss was noted by the House Appropriations Committee on June 10, 1955, in its report to the House. In addition, our eligible member systems have lost, in our estimation, between $200,000 and $250,000 by not being able to purchase this power to date.

On May 1 of this year, the Government began selling those 60,000 kilowatts as dump energy to VEPCO on a day-to-day basis. The company is paying the Government the pitifully inadequate price of only 3 mills per kilowatt-hour. That VEPCO can do this is simply because it is the only system tied in with the project and in position to take this power.

On May 19 and 20 of this year, we appeared before the House Appropriations Subcommittee on Public Works and reported the long delay involved in this matter. We recounted the history of our efforts to buy this power, much as we have herein done, and we registered a vigorous protest that the company had not lived up to the promise it had made the Congress in 1951 and 1952. We also told the House subcommittee "that the Department of the Interior has 'dragged its feet' in this matter." We requested the House subcommittee to appropriate a $150,000 fund, with instructions to the Department of the Interior to use it to make a marketing analysis respecting all available, but unsold, power from Government projects in the Southeast. Such an analysis would, among other things, determine the economic feasibility of constructing a self-liquidating transmission line from Kerr project to our systems.

The House subcommittee heard our testimony receptively, as the report of its parent committee to the full House on June 10 clearly shows.

The Carolina Power & Light Co., however, responded in quite a different manner. On June 1, 1955, the company's president, L. V. Sutton, released to the press in North Carolina a statement which, among other things, charged that "Mr. Crisp is simply not telling the truth when he says that our company will not wheel Kerr Dam power to the North Carolina co-ops served by our company." Mr. Sutton also labeled me and Mr. T. Foley Treadway, Eastern N. C. Electric's engineer, as "public power advocates." His statement contained many misleading and incorrect charges concerning this entire controversy.

The company then proceeded to incorporate Mr. Sutton's full statement into an advertisement, which it carried in many—if not most—of Eastern North Carolina's daily and weekly newspapers. We attach one of these ads hereto as exhibit C. Upon the unanimous reply of the executive committees of both Eastern and Tarheel Electric, to the effect that I had made no untrue statements in this matter and had represented the cooperatives ably and honestly, the company placed another ad in the papers (in how many we do not know), which we attach hereto as exhibit D.

Note that the company did not so respond until 13 days following our testimony before the House subcommittee. Whether this delay in the company's response has any significance, we do not know. Moreover, we do not know whether the company has made any proposals to the Department of the Interior substantially different from those we have here mentioned.

We sincerely hope that it has. Mr. Sutton, however, in the first advertisement, as on other occasions in the past, states that the "point of disagreement and delay * * * is our unwillingness to put a Federal agency in the power brokerage business by selling it out power for resale to our customers in competition with us." What he obviously means is that the Carolina Power & Light Co. is not willing to sell the Government firming power. We respectfully submit that this position of the company is inconsistent with what it told the Congress in 1951 through the testimony we have hereinbefore cited.

We have not replied to the company via advertising. Our people haven't the means, much less the inclination, to attempt to influence public opinion in this manner. Even if we did, we certainly couldn't compete with the vast resources of this large monopoly utility. We wish here, however, to register as forcefully as we know how our protest that the utility has resorted to such tactics in this matter. We regard these ads as an attempt to confuse the issue and to divide our own people in what has been—and what continues to be—their united effort to exercise their preference rights under the law.

On June 13, 3 days following the report of the House Appropriations Committee, the Department of the Interior mailed to Eastern N. C. Electric a proposal, in definitive contract form, on the basis of which the Department expressed the wish that further negotiations on this matter might forthrightly proceed.

This proposal was in the form of a suggested contract between the Government and Carolina Power & Light Co. Two days later, on our request, the Department forwarded a second definitive proposal as a suggested basis for a contract between the Government and each eligible member system.

We have since requested in writing from the company a third necessary proposal, which would be between the company and the individual member cooperatives and would provide for the furnishing by the company of our power needs up and above those to be supplied by the Government. We hope to receive this proposal from the company shortly.

Until we do, we cannot make a competent analysis of the entire suggested arrangement, much less determine whether that arrangement may constitute the basis for an eventual agreement. Under the proposals forwarded to us by the Department of the Interior, a preliminary analysis indicates that the Government would sell and deliver to our cooperatives that portion of our proposed contract demands, which, from month to month, is available from the firm kilowatts generated at the dam, and that the company would contract to sell us directly any difference which might be involved: In other words, the company would firm for the cooperatives, not for the Government.

This proposal raises serious questions which cannot, of course, be answered until we receive the third above-mentioned suggested contract.

Mr. Chairman, we sincerely hope that the developments which have transpired since our testimony to the House subcommittee on May 19–20 may lead, eventually, to a satisfactory resolution of this long and wasteful stalemate. We cannot, however, predict at this point that they will. We would remind the subcommittee that we have been hopeful before. We would remind the subcommittee that, notwithstanding promises and proposals which have often been made, we are still without a satisfactory contract. We would also remind the subcommittee that during all the years this matter has gone unresolved, the Congress has never extended to either our member systems or the Department of the Interior the means whereby, such promises and proposals failing, an alternate solution of our problem might be achieved.

We are not alone in our concern over this matter. The North Carolina Grange has supported our efforts to buy this power. Following our testimony on May 19–20, the grange wrote all members of the North Carolina congressional delegation and requested their support of the transmission study fund we sought. Moreover, the North Carolina Farm Bureau Federation has also supported our effort. We attach hereto as exhibit E a resolution adopted by that organization during its annual State convention last fall.

The North Carolina Rural Electrification Authority also supports our effort. We attach hereto as exhibit F a statement by Gwyn B. Price, the authority's chairman, issued 5 days after our testimony to the House subcommittee on May 20.

In view of present developments in this matter, we do not submit any specific request to this subcommittee. Instead, we ask only that, in your own discretion and best judgment, you provide for us whatever means you find are appropriate to strengthen our present efforts to solve this problem. We wish to make it unmistakably clear, however, that we have no way of assuring ourselves of a final, satisfactory solution unless the Congress of the United States provides some alternate method which will be at the Department of the Interior's disposal in the event current voluntary efforts at agreement are not successful.

EXHIBIT A

Electric cooperative purchases of power from the John H. Kerr project under the SEPA-VEPCO Wheeling arrangement to Mar. 1, 1955

	Kilowatt-hours purchased	Total cost	Average kilowatt-hour cost in mills	Savings [2]
Virginia cooperatives: [1]				
Mecklenburg	62,154,522	$435,849	7.01	$32,166
Southside	74,449,925	517,978	6.96	40,397
Northern Piedmont	23,383,518	161,691	6.91	19,401
Shenandoah Valley	64,196,677	417,112	6.50	64,363
Virginia	68,360,460	449,859	6.58	62,848
Prince George	10,204,740	70,597	6.92	7,203
B-A-R-C	19,595,098	136,274	6.95	13,905
Craig-Botetourt	8,235,298	59,309	7.20	16,478
Community	22,737,951	157,140	6.91	13,395
Northern Neck	19,806,611	133,140	6.72	16,362
Central Virginia	34,035,646	232,830	6.84	22,437
Prince William	10,852,260	73,348	6.76	8,043
Total	418,012,706	2,845,125	6.81	316,998
North Carolina cooperatives: [3]				
Albemarle (Hartford)	8,775,556	62,785	7.15	3,032
Edgecombe-Martin County (Tarboro)	13,306,151	90,999	6.84	8,797
Halifax (Enfield)	6,459,200	45,637	7.07	2,799
Roanoke (Rich Square)	21,018,377	150,955	7.18	6,720
Woodstock (Belhaven)	5,885,160	42,194	7.17	1,945
Total	55,444,444	392,569	7.08	23,293
Grand total	473,457,150	3,237,695	6.84	340,292

[1] The Virginia cooperatives began purchases from the project in 1952.
[2] Compared with the cost of the same kilowatt-hour purchases from Virginia Electric & Power Co., whose rate to the cooperatives was 7.5 mills per kilowatt-hour plus a slight minimum demand charge.
[3] The 5 North Carolina cooperatives began purchases from the project Aug. 1, 1953.

EXHIBIT B

AN ANALYSIS OF THE POSITION OF THE ELECTRIC MEMBERSHIP CORPORATIONS IN RESPECT TO SECURING KERR PROJECT POWER AND KNOWN PROPOSALS SUBMITTED IN CONNECTION THEREWITH, JUNE 8, 1955

The cooperative consumers throughout the eastern half of North Carolina, like the rural electric consumers elsewhere, have always had as one of their principal problems a concern for present and future wholesale power supplies, including the very prime economic consideration. Like all other cooperatives and municipalities named in section 5 of the Flood Control Act of 1944 and having a preference to the purchase of such power, we looked forward with great anticipation to completion and operation of the Kerr project on the Roanoke River approximately on the Virginia-North Carolina line. As a group of cooperatives, and as separate cooperatives, we have endeavored in every known way to assure ourselves of obtaining the maximum benefits to which we are entitled from the operation of this fine hydro development. We have endeavored to cooperate with agencies of the Government whose responsibility it is to market this power by giving to them such information as they have needed with relation to our present and future power requirements. As early as 1950 we indicated through the Southeastern Power Administration our intention to purchase such Government power as we could use and as was made available for our use.

Various representatives from our cooperatives have from time to time appeared before congressional committees in support of requests by the Department of the Interior for funds to construct transmission lines to load centers throughout the area as the only means which we could see for delivering power into our area for use by our cooperatives.

Not since 1952 has the Department of the Interior made a request of funds from the Congress with which to construct transmission lines to deliver the Kerr project power to the preference customers, although we have for several years had an official file with the Department applications for the receipt and use of this power. In the absence of any agreement on the part of the Carolina Power & Light Co., which owns the transmission lines lying between our load centers and the project,

and in absence of any effort on the part of the Department of the Interior to provide alternate means of delivery of this power to us, we are left to wonder what will happen to our power and how it will be delivered to us.

We call attention to an excerpt from the record before the Interior Subcommittee of the House of Representatives as follows: (Statement by Secretary of the Interior Douglas McKay, January 21, 1954):

"Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives, 83d Congress, 2d session, part I (Interior Department appropriations for 1955, p. 18)."

BUREAU PROGRAMS

Southeastern Power Administration

"The Department is not proposing construction of transmission facilities in this area. It is believed that arrangement can be made in addition to those already made with private utilities and preference customers for the disposal of Government power in an economical manner and in accordance with preference provision of law. To accomplish this purpose, negotiations for the sale and transmission of power and energy developed at power-producing projects are under way. For a number of the projects, long-term contracts have been executed. However, the Department is disposing power in several instances under interim agreements. In addition, initial energization is scheduled for two projects in 1955 and 1956. It is expected that long-term arrangements can be made for disposal of this power through facilities of operating utilities in the area to mutual advantage of all concerned."

While this written statement was filed with the Appropriations Committee in January 1954, we have not to date been presented any proposal by the Secretary of the Interior for transmission of any Kerr project power to the cooperative consumers in North Carolina. We understand that the Secretary has requested no funds for providing transmission facilities in the absence of agreement by Carolina Power & Light Co. to transmit this power for the Government. Thus the cooperatives are still without means of receiving the benefits from this project, although the Secretary indicated 16 months ago that he expected to work out agreements consistent with the law.

The Kerr project first went into operation November 18, 1952, and as early as April 1953 the project became capable of delivering power to preference customers outside of the VEPCO service area.

In view of the fact that there had been no provisions made for delivery of this power, no preference customers in the service area of Carolina Power & Light Co. in North Carolina have received any benefits therefrom.

Virginia Electric & Power Co. has contracted with the Government in such an arrangement that all of the cooperatives in their service area, including cooperatives in the Virginia Electric & Power Co. service area in the State of North Carolina, are receiving benefits from the project. In this arrangement the Virginia Electric & Power Co. agrees to sell to the Government the supplemental and firming steam energy needed by the Government, which in turn has contracted with the preference customers for a block of Kerr project power. The company then wheels this power for the Government and has agreed also to sell to the cooperatives directly any additional amounts of power that they may need over and above the amount for which they have contracted with the Government. The arrangement is reasonable and beneficial to all parties concerned. The preference customers are able to purchase the power directly from the Government in strict accordance with law; the Government disposes of its power on a businesslike basis and at the lowest rates consistent with sound business principles; and the power company gets the utilization of a large block of hydro power in its system for the benefit of all of its consumers. The company, in addition, gets paid for the use of its transmission facilities and receives a profitable rate for the sale of steam energy needed by the Government in the transaction of its marketing.

If an arrangement similar to the Virginia Electric & Power Co. contracts were in effect in the Carolina Power & Light Co.'s eastern North Carolina service area, the project, according to our information, could have delivered 30,000 kilowatts of power and necessary accompanying energy per month since the late spring of 1953. We calculate that our failure to receive this power is resulting in losses to preference customers of the area to the extent of approximately $7,000 to $8,000 per month, or $84,000 to $96,000 per year.

We have urged the Secretary of the Interior to reach an agreement whereby the cooperatives may receive the benefits of this fine hydro project by any means which will satisfy two conditions:

1. That the cooperatives, as preference customers under the law, have unencumbered title to the power direct from the Government.

2. That the cooperatives, as preference customers under the law, receive a fair share of the economic benefits from the project, both now and in the future.

Our insistence upon point No. 1 above is not a whim. Our position with reference to title to the power is based on sound reason and the law. We do not believe that the Secretary of the Interior can by any means give a preferred rate to electric consumers in the State of North Carolina. We believe that section 5 of the Flood Control Act of 1944 gives preference in the sale of project power to cooperatives (as one of the preference customers named in the act, which gives title to the cooperatives), but the act does not say that the preferred agencies will receive any preference as to rates. We do not believe, therefore, that the Secretary of the Interior can give a preference in rates to any group of customers in the State of North Carolina. This would be contrary to the Flood Control Act itself.

We do believe that we have a preference to title to the power and whatever rate results from title to this power would be legally and rightfully ours. We do not believe that any arrangement whereby title to this power would pass to a third party could guarantee that we have an entitlement to the rate which would result therefrom.

With reference to point No. 2, that the cooperatives receive a fair share of economic benefits from the project, we wish to state that the use of project power in the integrated system of the companies will have considerable benefits which can be ascertained. In the case of the use of project power by Virginia Electric & Power Co., the benefits are estimated to be approximately $1,200,000 per year. Since approximately one-third of the project is available for marketing in North Carolina and would logically flow to the Carolina Power & Light Co., we assume that this benefit would be approximately equal to one-half of the benefit to Virginia Electric & Power Co., or approximately $600,000 per year.

We do not believe that our two principles enumerated above are unreasonable or inconsistent with the law in any respect. We ask simply that the law be tracked in the marketing of this power by the Secretary of the Interior, who is authorized by the same law to dispose of the power.

In a meeting with Assistant Secretary of the Interior, Fred G. Aandahl, on December 9, 1954, we were requested to submit a proposal for disposition of Kerr project power to the cooperatives in the State of North Carolina. We consequently drafted a proposal in definitive form which we transmitted to the Assistant Secretary on February 18, 1955. The proposal submitted by the cooperatives is essentially the same as the Virginia Electric & Power Co. contractual relations; a block of power would be delivered into the system of the Carolina Power & Light Co., which, when taken together with firming and supplemental steam energy to be purchased by the Government, would give the Government a block of salable power to designate for the use of preference customers in the State. Those preference customers would contract directly with the Government for purchase of this power at their load centers. The company would agree to wheel this power over its existing facilities for a wheeling rate to be paid by the Government. The preference customers would pay the project rate (90 cents per kilowatt per month plus 4.5 mills per kilowatt hour) directly to the Government and would purchase any quantities of power needed, over and above the amount of power allocated by the Government from Kerr project, from the Carolina Power & Light Co.

Thus, the companies would continue to deliver power to the preference customers over their transmission facilities, as they are doing at the present time, but the cooperatives would become customers of the Government for a portion of their power needs. This power would be delivered at a reasonable rate for transmission by the company. The company would in addition receive a fair rate for the supply of steam energy to the Government to firm up and supplement the power generated at the hydro project. The company's largest benefits would be from the use in their company system of a large block of peaking hydro power and energy, which could be obtained by the company at much lower rates than the cost to produce an equivalent amount of steam power. The difference in cost to provide these two facilities is estimated to be approximately $600,000 per year.

The proposal, as made, consists of three contracts:

1. Contract between the cooperatives and the Government for the supply of a specified block of Kerr project power at the project rates.

2. A contract between the cooperatives and the Carolina Power & Light Co. for the supply of the additional needs of the cooperatives at the applicable company rate for such service.

3. A contract between the Government and Carolina Power & Light Co. providing for the acceptance of the project power by the company and delivery of the designated power to the preference customers, together with provisions for the sale of supplemental and firming steam energy needed by the Government in marketing of Kerr project power.

Thus, our proposal, which now is in the hands of the Secretary of the Interior, is the same in principle as the Virginia Electric & Power Co. contracts, which have been successfully operating for all of the months during which the North Carolina cooperatives, except the five in VEPCO's service area, have received no benefits from the project.

The Carolina Power & Light Co. has made what it calls a proposal to the Secretary of the Interior for the marketing of Kerr project power. This proposal is not in contract form and only sets forth what might be classified, as they put it, "principles to be embodied in a proposed contract." In this proposal the company offers to take all of the power from the Kerr project and, in the words which the company uses, wheel this power to the preference customers. But the representatives of the company state flatly that the cooperatives would still remain customers of the company; therefore they could not be customers of the Government and, in our opinion, the State utilities commission would have control over the rate at which this power would be sold to the cooperatives. In other words, the company puts an entirely different definition on the word "wheel" from that which is generally accepted, and their interpretation of the word "wheeling" has no meaning whatever to the cooperatives because the cooperatives would still have no control over, or ownership of, the power from the Kerr project. The company's proposal resolves itself into a buy-and-sell agreement. The cooperatives do not receive the benefits of ownership of the power and have no guarantee that the rates of resale will remain as proposed by the company. In this proposal it is provided that the cooperatives will pay the company for the power and there is nothing whatever in this proposal which would in any way give the preference customers the ownership and title to the power.

Until the company spells out a definitive contract we have no way of knowing what they mean by their proposal other than as they explain its meaning to us; and the explanation of their proposal is not a satisfactory one to the cooperatives due to the fact that they are determined to receive and retain the ownership of the power from the project.

The proposal of the company constitutes a discounted bus bar sale to the company, with the full benefits of the project flowing to it in its system and a portion of these benefits to be passed on through an insecure arrangement for resale to the cooperatives. We do not believe that the Carolina Power & Light Co. can designate a class of customers, in this case cooperatives, to receive a preferential rate. The preference, as stated in the Flood Control Act of 1944, is for the sale of power from Government projects to certain preferred customers. Whatever benefits accrue because of title to this power would legally belong to the purchaser. We do not believe that the Secretary of the Interior can transfer this responsibility and privilege to the Carolina Power & Light Co. and require it, in turn, to pass the preference to cooperatives or any other preferred agencies.

We, therefore, find it necessary to reject the Carolina Power & Light Co. proposal as being inconsistent with the law, contrary to the cooperatives' interests, and, if accepted by the Government, constituting a denial by the Secretary of the Interior of his responsibility as required by section 5 of the Flood Control Act of 1944 in the marketing of project power.

We believe that it is time that the Secretary of the Interior acted in behalf of the preference customers as he is directed to do in the Flood Control Act of 1944. We believe that he can fully comply with the law by indicating acceptance of the proposal which we have made, subject only to negotiations with the company on the rates to be paid for wheeling, the quantities of power to be made available to the preference customers, and the rates to be paid for firming and supplemental steam energy needed by the Government. We believe that such an arrangement is fair to all parties concerned and would serve as a means of settling this very difficult problem.

But we also believe the Congress should provide the Department of the Interior with the means whereby it might at least investigate an alternative approach to this problem in the event the company will not, if offered our proposal by the

Department, accept it. The only alternative would, of course, be a Government-owned, self-liquidating transmission system if such is determined to be economically feasible. We therefore request the Congress to appropriate the $150,000 fund which has been requested for the purpose of financing a marketing analysis for all projects administered by Southeastern Power Administration. Such a fund, with instructions to the Department of the Interior to employ it to ascertain, among other things, the feasibility of such a transmission system, would give us some hope that ultimately our cooperatives will receive that portion of Kerr project power to which, under the law, they are entitled.

EXHIBIT E

PORTION OF NORTH CAROLINA FARM BUREAU FEDERATION POLICY RELATING TO RURAL ELECTRIC SERVICE, ADOPTED IN 1954

We commend and approve public power as exemplified by the TVA and we believe that the Nation's river basins should be developed with the objective of assuring the fullest uses of all our natural resources.

We believe that the Federal Government should continue to assume primary responsibility for the integrated development of basins whenever and wherever other agencies, either public or private, are unwilling or unable to develop them to their full power. We believe also that such electricity as is produced in such developments and is not required by the Federal Government for its own purposes should continue to be made available to the people in accordance with the preference laws, which for over 48 years have provided that nonprofit cooperative and municipal electric systems should have first call on surplus Government-produced power.

In this respect, we call particular attention to the fact that 5 electric cooperatives in North Carolina and 11 in Virginia have been able to realize great savings by purchasing wholesale power from the John H. Kerr Dam in Virginia, while 12 other North Carolina cooperatives have been unable to secure a satisfactory transmission arrangement to bring this power to their load centers.

We therefore recommend that the Congress finance a survey to determine the practicality of the Federal Government's construction of a self-liquidating transmission system from this project into North Carolina.

EXHIBIT F

STATEMENT OF GWYN B. PRICE, CHAIRMAN OF THE NORTH CAROLINA RURAL ELECTRIFICATION AUTHORITY WITH RESPECT TO THE REQUEST OF THE NORTH CAROLINA COOPERATIVES FOR FUNDS AIMED AT BRINGING A TRANSMISSION LINE TO THEIR LOAD CENTERS

The State authority is in basic sympathy with efforts now being made to secure transmission lines to bring power from the John H. Kerr Dam to the load centers of some 14 rural electric cooperatives in North Carolina. It now appears that this is the only way these cooperatives and other preferred agencies will ever be able to purchase their allotted portion of this power, as under the law they are entitled to do.

In 1949 the State authority chartered Eastern North Carolina Electric Membership Corp. We have assisted this corporation, made up of 17 rural electric cooperatives, in its efforts to secure this cheaper source of wholesale power for the benefit of our farm people. All efforts toward that end having thus far failed, it now seems obvious that a self-liquidating transmission line is the answer to this problem.

GENERAL STATEMENT

Mr. CRISP. I think this problem is of peculiar interest to this particular committee, because the controversy that is going on in connection with this problem now springs primarily from testimony that was rendered this committee in 1951 and 1952. I don't want to read that testimony, Mr. Chairman. It is a matter of record. But if you will turn to pages 2, 3, 4, and 5 of my statement, you will note the exchange

that took place between yourself and Senator Ellender, and Mr. L. V. Sutton, the president of the Carolina Light & Power Co., who at that time was fighting a proposed transmission line from this project into North Carolina.

Without reading that testimony, Mr. Chairman, we want to submit to you that it is our unequivocal opinion that in fighting that transmission line at that time on those two occasions, that the statements made by Mr. Sutton to this committee, and therefore to the Congress, added up to a promise on the part of his company not only to wheel this power to our systems, but to firm on behalf of the Government the benefit of the dependable capacity that is in the Kerr Dam project.

We testified about the long stalemate in connection with this problem before the House on May 19 and 20. As a result of that testimony, the company saw fit 13 days later—why they waited that long we don't know, Mr. Chairman—not only to come out with these vicious press releases, but the advertising material you have there in your initial exhibit. They put those advertisements in most or many of the papers of eastern North Carolina, and we submit that if you will read that advertising, and the counteracting information that Mr. Ward has already given you in exhibit A of his testimony, you will see why we are so concerned about this problem right now.

I want to make this very clear to the committee, because I think it has significance. We testified before the House on May 19 and 20. On June 10 the House Appropriations Committee, in sympathetic response to our testimony there came out with a report which I trust some of you have read, if not all of you.

Chairman HAYDEN. I have it before me here. It says Assistant Secretary of Interior stated the contract for that purpose is long overdue.

> The committee is deeply concerned with reference to the situation now existing relative to the marketing of power from the John H. Kerr Dam, N. C. and Va., to preference customers in eastern North Carolina. Through the inability of the Department to negotiate an acceptable contract for the sale of power with the interested agencies involved the total estimated loss to the Federal Government has been $868,000. This loss will continue to mount so long as the power is sold as dump energy at the rate of only 3 mills per kilowatt-hour.
>
> The Assistant Secretary of the Interior for water and power testified before the committee on this matter on May 31, 1955, and stated "* * * a contract for that purpose is long overdue * * * I am not satisfied with the progress we have made in contracting for the delivery of that power in the State of North Carolina."
>
> The committee trusts that the Department will take immediate and effective steps to alleviate this dissatisfaction on the part of the Assistant Secretary and to stop the unnecessary loss of revenue to the Federal Government.

What you want us to do is to confirm what the House has recommended.

Mr. CRISP. And strengthen it, Senator Hayden, for this reason. We have been asking for arrangements for this power for over 4 years. It became available 2 years ago. Three days following that report, the Department of Interior did just what that report trusted the Department would do. It sent us copies of 2 of the 3 necessary proposals whereby an arrangement eventually might be effected. If this committee will come out perhaps just a little bit stronger, we may get this thing solved this time. If you ask us why we are here in view of the fact that that report was made, and the response to it by the Department came forward 3 days later, we say merely this. We have been asking the Congress to help us out in this matter for

over 4 years. We have never had at our disposal any means whereby such proposals have been presented to us failing the Department of Interior had some other means of solving this problem for us.

Mr. Sutton came before this committee as the cited testimony will show, and much in the manner of the Brer Fox story, he said if you won't build that transmission line, I will wheel that power. We think he said he would firm it. He now takes the position that he will not sell power to the United States Government. He says that is putting them in the power brokerage business to go into competition with him.

We are not here to argue the academics of that. If we can get the benefits of that project through any other arrangement, that is fine. As long as we get security and the arrangement is in conformity with the law, that is all we ask for. If this committee can give us any additional utensil if that is the proper word, to induce the necessary parties in this arrangement after 4 years of promises, bargains, and proposals and everything else, to come and give us that arrangement we will be mighty happy.

Chairman HAYDEN. You do not care whether the company is willing to sell to the United States or not; as long as you get your power, you are satisfied.

Mr. CRISP. That is right. One of the things that is involved in this is not who is going to buy power from whom at one price, but whether or not an arrangement that is agreed upon can be guaranteed. Will it stand up before our utilities commission. We are entitled as preference customers to security in the contract we get. That is the only thing that divides the company and the cooperatives on this matter right now. We want to repeat here a charge we made before the House for whatever it might be worth. Evidently it was worth something there. We think the Department of Interior has dragged its feet in this matter. We don't have any doubt about it. You know when you put that old burr under the mule's tail, things begin to happen. If you can do that to help us out, sir, we will be mighty thankful to you.

I would like to say, sir, you will see on the last page of our testimony—if I sound mad, I am, but it is not at you—if you see what they said about me in that, and you will understand why I am a little angry about this. We are not asking you to take any specific action. We are leaving that wholly within your discretion. While we don't have time to go into all of it today, I hope you gentlemen do read the two statements that have been filed with you, because I think such of you, if any of you there are, who are not familiar with the background of this, will familiarize yourself with this statement, you will get the righteous indignation we feel standing before you right today.

Chairman HAYDEN. Thank you.

Mr. CRISP. Thank you, sir.

Chairman HAYDEN. Mr. Hudgins.

VIRGINIA ASSOCIATION OF ELECTRIC COOPERATIVES

STATEMENT OF ALEXANDER HUDGINS, EXECUTIVE SECRETARY

PREPARED STATEMENT

Mr. HUDGINS. Mr. Chairman, I would like to make a brief statement in connection with the statement I have filed with you.

Chairman HAYDEN. It will be included in the record in full.

(The statement referred to follows:)

STATEMENT OF ALEXANDER HUDGINS

My name is Alexander Hudgins. I am executive secretary of the Virginia Association of Electric Cooperatives and editor of Rural Virginia, a statewide monthly publication, distributed to approximately 75,000 members of rural electrics in Virginia.

I am appearing before you today in the above capacity and also as a Virginia member of the Southeastern Power Committee, an organization of rural electric people in the Southeast interested in the efficient operation of multipurpose Government projects such as the John H. Kerr project in Virginia and the Clark's Hill project in Georgia.

The one phase of these projects I would like to emphasize in my statement today is the importance of transmission lines as a part of multipurpose projects so that the Government can realize the most revenue possible as far as hydropower enters into these projects.

At this very moment SEPA is selling 60,000 kilowatts at the John H. Kerr project as "dump" power at 3 mills. This would not be true if there were transmission facilities. But since there are no transmission facilities, these 60,000 kilowatts, although rightfully belonging to certain preference customers in North Carolina, cannot be delivered because the Government has authorized no transmission system and is unable, through its proper agency, to develop a wheeling agreement with the Carolina Light & Power Co. I understand that testimony before the Federal Power Commission, given by Secretary McKay of the Department of the Interior, indicates that this situation has cost the Federal Government $1.5 million during the past 2 years. Had there been a transmission line so that this power could have been delivered to its rightful owners—the preference customers in North Carolina—this financial loss would not have occurred. This is a good example of the complete failure of the high-sounding partnership policy of the administration.

This is just one example where the Government is unable to get the most return from its invested dollar, because transmission lines were not made a part of the John H. Kerr project.

The same story is true at the Clark's Hill multipurpose project, only it is a worse story. Not 1 kilowatt of electricity produced at Clark's Hill project has been delivered to a single preference customer in Georgia. It is sold as secondary power. There are no transmission lines available. The administration's partnership policy is a complete fizzle and this power goes at a dump power rate, and again the Government loses.

Mr. Chairman, I have taken the time you have graciously permitted me to have and emphasized this transmission phase of multipurpose projects because the time has come now when commercial power companies indicate their complete support of the administration's partnership program and then condemn these multipurpose projects for their high cost of operation when they (the commercial power companies) are often indirectly responsible for the high cost of operation when they fail to put into practice any semblance of the administration's partnership ideas.

I have mentioned the John H. Kerr and the Clark's Hill projects. Others who will appear before you, I think, will point out the problem in the Arkansas, Missouri, and Oklahoma areas where partnership similar to what I have discussed here before you again looms as the key to efficient operation of multipurpose projects in the great Southwest.

This is a policy you must establish on the highest possible level Mr. Chairman, and I think your committee has not only a responsibility, but has a great opportunity to the American public, if you will indicate your understanding and approval of this phase for the efficient operation of multipurpose projects.

GENERAL STATEMENT

Mr. HUDGINS. I am Alexander Hudgins, general manager of the Virginia Association of Electric Cooperatives. I am a member of the National Rural Electric legislative committee.

From the Virginia standpoint I would like to say to you that several years ago we worked out with the Virginia Electric & Power Co., a wheeling agreement whereby 13 of the 16 electric cooperatives in Virginia received Buggs Island power wheeled by Vepco, that is, wheeled and firmed by Vepco.

As a result of that, we have a satisfactory working agreement through the Southeastern Power Administration. There are 60,000 kilowatts of that power under the preference clause that are allotted to the preference customers of North Carolina. A very small amount of that is being wheeled by Vepco to five rural electrics in North Carolina. The rest of that power, because there is no wheeling agreement with CLMP, is being dumped and being dumped at a rate cheaper than it would bring if it were firmed up and wheeled as we in Virginia receive it. Because of that, we would like to see this committee pay attention to that part and try to get some sort of mandate that will give the Department of the Interior a reason to go ahead and try to work out an agreement similar to that which we have in Virginia.

We have a selfish reason in it, too, because if this continues to be dumped, then the rate of the power we get in Virginia is bound to rise. We don't want the price to rise, because the Interior Department has not carried out their part of the deal, and delivered this 60,000 kilowatts of preference power to the preference customers in North Carolina, just because they have not been able to work out a wheeling agreement.

We were successful in Virginia, and we did it, sir; as a result of the Congress appropriating money for a transmission line from Buggs Island to Langley Field. The minute you did that, we succeeded in getting our wheeling agreement, and we are getting our share of the power of Buggs Island. We want these boys in North Carolina to share the same benefits and by doing so, to keep our rate from increasing.

Thank you very much, sir.

Chairman HAYDEN. You are welcome.

Mr. Robinson, the chief staff engineer.

NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

STATEMENT OF CHARLES ROBINSON, STAFF ENGINEER

FORT RANDALL TO NELIGH, NEBR. LINE

Mr. ROBINSON. Thank you, Mr. Chairman. My name is Charles Robinson. I am staff engineer with the National Rural Electric Cooperative Association.

We are interested in several projects in the Bureau of Reclamation area in the west and in the Bonneville Power Administration area, but in view of the shortage of time, I would like to talk about two projects. One of them is the line proposed by the Bureau of Reclamation from the Fort Randall powerplant to Neligh, Nebr. I believe there is

about $900,000 in the budget for a 115-kilovolt line between those 2 points.

Our people in Nebraska are convinced that the line to Neligh is insufficient to serve their needs and that a 230-kilovolt line from Fort Randall to Grand Island is required. The 230-kilovolt line to Grand Island was originally programed by the Bureau of Reclamation and the switching and recording equipment at the Fort Randall substation bears that out. I have a picture of the Fort Randall switchyard here which I might submit for the file, which shows that a Grand Island line was originally contemplated there.

We feel that the line is economically justified to Grand Island, and that it is required to deliver Fort Randall power into Nebraska.

The House committee deleted the $900,000 for construction of the 115-kilovolt line from Fort Randall to Neligh. In their report they recommended that the Bureau study the feasibility of a higher-capacity line which would presumably be the line to Grand Island. However, the House floor action in restoring the budget negatived that recommendation. As we understand it, the $900,000 is back in the bill, which would provide for the lower-voltage line from Fort Randall to Neligh.

We are asking that the subcommittee recommend initiation of construction for the 230-kilovolt line to Grand Island, or at least as a minimum, recommend that the voltage on the line to Neligh be doubled, so that you would then have a 230-kilovolt line from Fort Randall to Neligh, which could later be extended to Grand Island. Neligh is about halfway between Fort Randall and Grand Island.

Chairman HAYDEN. What is the difference in cost if this is put in as a 115- or a 230-kilovolt line?

Mr. ROBINSON. The 230-kilovolt line I believe they estimate would cost about $10 million. I am not aware of the total cost of the Neligh line as now programed.

Senator MUNDT. Are they not now reaching that same goal by having two 115-kilovolt lines totaling up to 230-kilovolt capacity?

Mr. ROBINSON. I don't think so, because there is no line programed into Grand Island, Nebr.

Chairman HAYDEN. That is the point. The distance from the dam to Neligh is how many miles?

Mr. ROBINSON. I guess about 75 miles.

Chairman HAYDEN. How far from there on to Grand Island?

Mr. ROBINSON. Another 75 miles.

Chairman HAYDEN. Your proposal is to build a line twice as long with twice the capacity at a total cost of $10 million as compared to the $900,000 appropriated in the House bill?

TOTAL COST OF NELIGH LINE

Mr. ROBINSON. Yes, sir. But I am not sure that $900,000 would be the total cost of the Neligh line.

Senator YOUNG. Will there be sufficient power to warrant construction of a line of that capacity?

Mr. ROBINSON. The economic studies conducted by the Nebraska Public Power Association indicate that the line would be feasible. It would carry approximately 30,000 kilowatts of firm power, and large

blocks of irrigation and secondary power. There would be an additional block of firm power when Oahe comes in.

Senator YOUNG. The power from Garrison Dam is already oversubscribed.

Mr. ROBINSON. Yes, sir, that is true, but the State of Nebraska has a firm commitment of 100,000 kilowatts of Bureau power.

Senator YOUNG. If they got more big lines, they would want more power in there.

Senator MUNDT. It seems to me that a 230-kilovolt line would provide a surplus capacity as against the power allocations made among the various States out there to be served in Minnesota, South Dakota, North Dakota, and the entire area. Would not this provide a surplus capacity beyond the power allocation?

Mr. ROBINSON. The power allocations made so far are firm power. There would be 30,000 kilowatts of firm power transmitted over this line until Oahe comes in. It is my understanding that no Oahe power has been committed yet. What secondary power used for irrigation would go over the line, I am not prepared to say exactly. I believe our people from Nebraska will testify tomorrow on the feasibility of this particular line. If the line is ever to be built to Grand Island, it would seem poor economics to build a 115-kilovolt to Neligh and have to rebuild the first portion of it in order to carry it to Grand Island. So if the committee thought it would be too much to recommend construction of the 230-kilovolt line all the way to Grand Island, we would secondly suggest as a substitute that the line to Neligh be changed from a 115- to a 230-kilovolt line so that at some later time it could be extended without rebuilding the first portion of it.

Senator MUNDT. In your capacity you have to represent all the REA's in the country. You would not be advocating taking some power from the REA's in South Dakota and giving it to the folks in Nebraska?

Mr. ROBINSON. No, sir. The second project I was going to recommend would be a great help to the REA cooperatives in North and South Dakota both, if I may go on to that point.

Chairman HAYDEN. What is that?

FORT PECK AND GARRISON TRANSMISSION LINE

Mr. ROBINSON. It is not included in the budget. It is a 230-kilovolt transmission line between Fort Peck and Garrison. As you know, the Bureau of Reclamation has just brought into production a 50,000 kilowatt hydro plant at Canyon Ferry in Montana. When the Bureau appeared before the subcommittee seeking appropriations for that plant, they said that the power would be marketed at 5½ mills for firm and 3 mills for nonfirm. But because there is no market in the immediate vicinity of that dam, except for the Montana Power Co., last year the Bureau sold 89 percent of the output of that project to the Montana Power Co. at 2½ mills, which is a dump rate.

We have daily load curves for a typical 5-week period which show the output of the Canyon Ferry plant. It is being operated on the Montana Power Co.'s system so that the maximum output coincides with the normal peak loads of the area.

There is a large block of that Canyon Ferry that is firm going to the Montana Power Co. at 2½ mills.

SURPLUS OF HYDRO POWER ON MONTANA SIDE

Senator YOUNG. There has been a surplus of hydro power on the Montana side for quite a long time.

Mr. ROBINSON. Yes. That is known as the western area of the eastern division of the Missouri River Basin system. By contrast with that, in North and South Dakota, getting back to Senator Mundt's question, and in parts of Minnesota and eastern Nebraska, there is a shortage of this firm Federal power. Our proposal is that a transmission line interconnecting the 85,000-kilowatt Fort Peck project with the backbone transmission line that goes up and down the Missouri River would enable Fort Peck power to be transmitted eastward over that line into the Dakotas and Canyon Ferry power could be transmitted northward to replace that Fort Peck power that is going to eastern Montana.

The Bureau has a lease agreement with the Montana Power Co. between Canyon Ferry and its Great Falls substation, and could use that leased facility to get that Canyon Ferry power up into eastern Montana, and ship the Fort Peck power eastward to the Dakotas. Thereby we could get a firm rate for this 2½ mill dump energy they are now selling to the Montana Power Co. We feel that is a very worthwhile proposal.

Chairman HAYDEN. What would it cost?

Mr. ROBINSON. I believe it would cost about $12 million, Senator. I believe that was our estimate. We made an estimate of it some time ago.

There is a second reason for that. As you know the Corps of Engineers is completing the study of a second 80,000-kilowatt power project at Fort Peck.

Senator YOUNG. And one more generator for Fort Peck.

Mr. ROBINSON. No, sir. It would be a second powerhouse.

Senator YOUNG. Couldn't Fort Peck use still another generator?

Mr. ROBINSON. There will be another 80,000 kilowatts there. Certainly you are going to need an outlet for that power. So we feel this Fort Peck to Garrison transmission line is very well worthwhile.

I would think the Federal Government would realize a lot more on its investment if something like this would be done. We think that it is something that should be thoroughly investigated. We feel there is a weak point in the Bureau's transmission system in that area between Fort Peck and Garrison. There is a long tenuous 115-kilovolt line that runs through there now, but most of the load on that line is for intermediate points. There is no real intertie there.

Senator MUNDT. That would connect the whole series from Fort Peck clear down to Gavins Point.

Mr. ROBINSON. Yes, sir; it would.

Senator MUNDT. You have it from Gavins Point to Garrison now.

Mr. ROBINSON. Yes, there is a backbone transmission line up and down the river. It would be the normal procedure to interconnect Fort Peck and Garrison.

Senator MUNDT. This is a gap of about how many miles that runs from Garrison to Fort Peck?

Mr. ROBINSON. 240 miles, I believe.

Senator MUNDT. Then your figure must be wrong of $12 million, because you gave us a $10 million figure on 75 miles.

Mr. ROBINSON. That was 150 miles.

Mr. Chairman, we would also like to urge the subcommittee to restore the $150 cut made on the Bonneville Power Administration operation and maintenance item. It is a small item, but it would have to be applied to actual system operation and maintenance. We are told that the Bonneville O. and M. budget was cut right down to the bare minimum before it went to the House. We hope the subcommittee will recommend the restoration.

HOUSE REDUCTION

Senator MUNDT. Is this a cut made by the House or the Budget Bureau?

Mr. ROBINSON. We have no way of knowing what was done by the Bureau of the Budget. This particular cut was recommended by the House committee.

Senator MUNDT. Below what the budget recommended.

Mr. ROBINSON. Yes, sir.

Mr. FAIN. Mr. Chairman, I had some attachments at the rear of my statement. We would ask the permission of the Chair that they be included in the record.

Chairman HAYDEN. Very well.

Mr. FAIN. Also, Mr. Chairman, Mr. Walter Harrison, who is executive manager of the Georgia Rural Electric Cooperative Association, and planned to be here today and speak on this matter of some of the problems in Georgia, could not be here but he did ask that he be allowed to put his statement in the record.

Chairman HAYDEN. That will be done.

Mr. FAIN. I should have it later in the day.

Chairman HAYDEN. Very well.

(The statement referred to appears on p. 695.)

Mr. FAIN. We certainly thank the chairman and members of the committee for the amount of time you have given us this morning. Thank you very much.

Chairman HAYDEN. The committee will stand in recess until 2 o'clock.

(Thereupon, at 12:25 p. m., a recess was taken until 2 p. m., the same day.)

AFTERNOON SESSION

The subcommittee reconvened at 2 p. m., upon the expiration of the recess.

Chairman HAYDEN. The committee will be in order.

We will hear from the Pacific Northwest Conference Committee, Mr. Erdahl's group.

PACIFIC NORTHWEST UTILITIES CONFERENCE COMMITTEE

STATEMENT OF C. A. ERDAHL, CHAIRMAN

GENERAL STATEMENT

Mr. ERDAHL. Senator Hayden, Senator Ellender, we appreciate coming before you gentlemen again to explain our problem, as we see it in the Pacific Northwest.

With your permission I would like to present our case by reading and setting the stage with this brief statement that I have.

Then I would like to call on these four gentlemen who are here for a very brief statement.

We have 1 or 2 props we would like to refer to and on which you gentlemen perhaps may want to ask some questions. I think we can do that in 20 or 25 minutes.

Gentlemen, this is the ninth consecutive year that the members of the Pacific Northwest Utilities Conference Committee have appeared before appropriations committees of the Congress to testify regarding the needs and problems of our regional power situation.

INCREASE IN POWER REQUIREMENTS

The power needs of our region continue to grow rapidly. A conservative estimate by the engineering committee of the Pacific Northwest Governors' Policy Power Committee is that the requirements of the region as a whole will increase by a minimum of 6,400,000 kilowatts between now and 1964.

And right at that point I would like to tell you gentlemen that that Governors' Power Policy Committee, the engineering committee of the Governors' Power Policy Committee, is made up of an engineering representative from each of the public and private utilities in the Northwest power pool.

It is not a Governors' determination, but, rather the engineers of the utilities.

This estimated increase will very nearly double the present load, and to meet such growth an investment of between 2 and 3 billion dollars must be made in power production, transmission, and distribution facilities.

In the west group area of the Northwest power pool, in which the utilities represented here operate, the powerload growth estimates are in proportion to that for the overall region. We face the responsibility of meeting a tremendous increase in the needs of more than 1 million customers, and the welfare and progress of the people of the Pacific Northwest demand that this responsibility be met.

The non-Federal utilities of our area clearly recognize that they have a large share of development responsibility on their own shoulders.

EXPANSION OF NEW FACILITIES

In the past 5 years, they have expended $527 million on the construction of new facilities to strengthen and expand service to the public. We are prepared to spend an ever greater amount during the next 5 years.

It is an inescapable fact, however, that our region must rely upon, to a large extent, the Government power generating projects under construction to supply growth requirements between now and 1960. The time needed to plan and build large hydroelectric projects is such that no alternative program can be considered to meet our immediate problem.

This means that work on the multiple-purpose projects under construction by the Corps of Engineers at The Dalles, McNary, and Chief Joseph, must go forward on schedule, or a power shortage will be imminent.

The schedule requires $63,500,000 for The Dalles; $18 million for Chief Joseph; $11 million for McNary.

$500,000 for initial planning for the John Day project, together with relatively small amounts for planning on other projects.

We urge, therefore, that the full appropriation needs for these projects be allowed by the Congress.

It should also be pointed out that once construction has started it is to the economic advantage of the Government that they be completed and put to work returning revenues to the Treasury as soon as possible.

Likewise, we urge the most favorable consideration of the budget requests for construction and for operation and maintenance funds for the Bonneville Power Administration. It is obvious that the development of the Government's transmission grid must proceed in step with the development of new generating capacity, and with the increase in loads at points of delivery.

The construction budget of Bonneville Power Administration has been reviewed carefully by the operating utilities in our group, and we feel that it represents a solid, practical, and necessary program of construction. We recommend its approval.

Also we recommend favorable consideration of the budget request for operating and maintenance funds for Bonneville.

It is apparent that a system which performs such a vital role in the Pacific Northwest power picture must be so operated and maintained as to give the greatest possible assurance of uninterrupted service. Any serious outage on the Bonneville system can affect the whole area, and cause widespread service difficulties.

Because of the closely knit nature of the Northwest power pool operation, and because of a certain degree of flexibility is highly desirable in Bonneville's operations, we wish to suggest that the Congress take this into consideration in its appropriation language and make it possible for actual operating conditions to be handled on an efficient basis.

Almost as urgent to our region as the maintenance of schedule on present construction is the need for prompt decisions on the start of new projects. We have no time to lose if we are to avoid a hiatus in our development when projects now building have been completed and their power output abosrved, as it will be almost as quickly as the generators start turning.

Much more needs to be done in the field of power development than we of the Pacific Northwest can reasonably expect the Congress to provide through appropriations. This has been well demonstrated in the past, and we would be less than realistic if we did not recognize that it will continue to be true in the future.

Since between $250 million and $300 million a year is needed in the Pacific Northwest for power facility construction, we wish to emphasize to the Congress that we need every Federal dollar we can get to support our river development program, and every dollar that can be provided from other sources.

CONTRIBUTION OF LOCAL UTILITIES

The local utilities of the area, as we have indicated, are ready, able, and willing to make a very substantial contribution toward this overall capital requirement.

Large though our development task may be, it is one which can be accomplished if we work together.

It is clear from the record of the past, and from the forecasts for the future, that new major projects should be started at the earliest possible date. How this is to be accomplished, and by whom, is not a decision that we alone can make. It is a question which, to a large degree, must be decided by the Congress.

All we can do is urge most strongly that prompt decisions are needed, so that each responsible party can go forward with his part of the necessary power development program, and essential flood control and navigation benefits can be achieved. The Pacific Northwest cannot afford to have its growth stifled by a power shortage, nor can the Nation afford to permit this to happen.

Many possible developments are being advanced by local utilities of the area, public and private, and it is important to understand that each of these is being studied by its sponsors in the light of how the particular project fits into the overall program.

We have learned from long and successful experience with the Northwest power pool that the integration of our power resources brings benefits to all parties, and it is against the background of such experience that all of our planning is being done today.

We have already attained a high degree of coordination in our regional power operations and in our approach to the problems of the future.

Our request to you of the Congress is that each of these problems that comes before you for action be studied in the same spirit, and that you make it possible for our development program to be continued without delay.

Adopted at a meeting of the Pacific Northwest Utilities Conference Committee at Tacoma, Wash., April 26, 1955, and was signed by:

Eugene Water Board, Ray Boals, secretary and superintendent
The Washington Water Power Co., K. M. Robinson, president
Public Utility District No. 1 of Wahkiakum County, Wash., John S. Dickson, manager
Portland General Electric Co., Fram M. Warren, president.
Washington State Power Commission, J. Frank Ward, managing director
Pacific County Public Utility District No. 2, Allen Rotta, manager
Mason County Public Utility District No. 3, Claude Danielson, manager
Pacific Power & Light Co., Paul B. McKee, president
Grant County Public Utility District, G. S. Smothers, manager

City of Seattle, Bob Jones, chairman, city utilities
Cowlitz County Public Utility District, O. G. Hittle, manager
Public Utility District No. 1 of Mason County, Dick Buechel, president
Grays Harbor County Public Utility District No. 1, F. J. Robbins, manager

Now, that statement has also been agreed upon by other utilities. I do have a letter here from the city of Tacoma that I would like to read.

JUNE 17, 1955.

Mr. C. A. ERDAHL,
Chairman, Pacific Northwest Utilities Conference Committee,
Tacoma, Wash.

DEAR MR. ERDAHL: I am sorry to advise that other commitments make it impossible for me to attend the Senate hearings in Washington, D. C., on Monday, June 20, 1955, with reference to the Bonneville Power Administration and Army Corps of Engineers' budgets.

This will confirm my conversation with you by which you were advised that the city of Tacoma appeared at similar hearings before the House of Representatives and stated that it was the city's position that both of the above-mentioned budgets as requested, should be granted in full.

I would appreciate it if you would advise the Senate committee on our behalf to the same effect. Will you also further advise that in our opinion the cuts made by the House should be restored in full inasmuch the cuts in the Bonneville budget would seriously interfere with the transmission grid and the cuts in schedule X of the Army engineers will delay the installation of generators at both the Dalles Dam and Chief Joseph Dam for power needed in the area.

The statement by the Pacific Northwest Utilities Conference Committee being presented has been studied both by myself and the public utility board of the city of Tacoma and we are all in complete accord with the statement which you presented to us for review.

Yours very truly,

DEAN BARLINE,
Director of Utilities.

Now, with the city of Tacoma and the other group, these utilities represent between 75 and 80 percent of all the electric consumers in the west group area, of the northwest power pool which includes all of the State of Washington, most of the State of Oregon, and the Panhandle of Idaho.

So it is really, we think, quite representative of the thinking of most people in our area.

Now, there may be other utilities who feel the same way, but we do not have their name on the dotted line, nor any particular wire or statement from them.

Chairman HAYDEN. The public and private power utilities in the Northwest get together and work in such fine harmony that it is always appreciated by this committee. Our churches or members of the various denominations get together and send missionaries to foreign countries at various times.

Could you not send a few missionaries to the Southwest area to try to impress upon them in your private capacity for the importance of getting together on these power problems? If we had as little trouble with those areas as we have in the Northwest we would get along very well.

Mr. ERDAHL. Of course, I should admit to you that all of our problems are not quite as simple and that we haven't solved all of

our problems, but we do try to get together on those items we can, wash our dirty linen at home, come back here and try to present our case to the Congress as best we can from the standpoint of what we think you should do to help in our situation, or what we can do to work cooperatively with the Federal Government in the program of power development.

We have appeared before all three of you gentlemen many times and have told you of our problems. We are up against the problem right now, however, having authorizations for certain of these projects that either should be quickly built by the Federal Government or some method devised so that they can be built by non-Federal utilities so that the area will not be faced with a continuing power shortage.

ICE HARBOR PROJECT

As an example, the Ice Harbor project has been authorized by the Congress since 1945. We think that project should either be started by the Federal Government or some action taken allowing public agencies or private agencies, or a combination of them to build these projects.

Senator ELLENDER. Is that not the one that there is so much opposition to?

Mr. ERDAHL. There has been a lot of fish opposition to the Ice Harbor project.

Senator ELLENDER. That is the reason for the delay. You mentioned in your statement you needed an expenditure of from $250 million to $300 million a year in order to keep the ball rolling.

LOCAL, PRIVATE, AND FEDERAL CONTRIBUTIONS

How much of that is spent, say, by privately owned utilities and then the municipalities and then the Federal Government.

If you do not have it available, could you give us a breakdown of how that huge amount is divided insofar as expenditure is concerned?

Mr. ERDAHL. I don't know that I have it right here, but I know we can make it available. If you will leave a spot in the record, we will make that information available.

Senator ELLENDER. In other words, the reason for the question is to find out, when you speak of fine teamwork, how you carry on; I think the record ought to show to what extent privately owned utilities do cooperate, how much money they do put up to carry the load and to make the development possible.

Mr. ERDAHL. I find that I have that information here now. I will be glad to turn it over to the clerk. We have estimated construction expenditures for generation, transmission, and distribution facilities for the various utilities listed and the amount of money that they would be willing to spend should some of these sites become available.

This other table shows projects under construction by non-Federal agencies and those proposed by non-Federal utilities and projects for which FPC preliminary permits have been issued. It also lists projects involving pending legislative proposals for cooperative Federal and non-Federal construction.

Chairman HAYDEN. The two tables may be included in the record.

(The tables referred to follow:)

Estimated construction expenditures for generation, transmission and distribution facilities, 1955–60

City of McMinnville	$400,000
The Washington Water Power Co	11,272,000
Grant County Public Utility District	364,525,000
City of Eugene	24,457,000
Puget Sound Utilities Council	670,000,000
City of Seattle	
City of Tacoma	
Puget Sound Power & Light Co.	
Chelan County Public Utility District	
Snohomish County Public Utility District	
Pacific Northwest Power Co	320,000,000
Portland General Electric Co	142,300,000
Pacific Power & Light Co	140,776,000
Grays Harbor County Public Utility District	3,450,000
Mason County Public Utility District No. 3	618,000
Pacific County Public Utility District	855,000
Washington State Power Commission	50,000,000
Cooperating municipals, Public Utility Districts, and others, not otherwise included	65,000,000
Total	1,893,653,000

Non-Federal hydroelectric projects under construction

Project	Sponsor	Capacity
		Kilowatts
Box Canyon	Pend Oreille Public Utility District	60,000
Skagit	City of Seattle	120,000
Cowlitz	City of Tacoma	460,000
Velm	City of Centralia	5,000
Upper Clackamas	Portland General Electric Co	15,000
Total		660,000

Non-Federal projects for which preliminary permits have been issued by Federal Power Commission, and on which investigations are in progress

Project	Sponsor	Capacity
		Kilowatts
Priest Rapids [1]	Grant County Public Utilities District	1,210,000
Rocky Reach [1]	Chelan County Public Utilities District	585,000
Mountain Sheep	Pacific Northwest Power Co	250,000
Pleasant Valley	do	800,000
Bruces Eddy [1]	do	240,000
Upper Baker	Puget Sound Power & Light Co	80,000
Pelton-Round Butte	Portland General Electric Co	350,000
Noxon Rapids	The Washington Water Power Co	328,000
Upper Lewis	Pacific Power & Light Co	250,000
Beaver Marsh	City of Eugene	30,000
Boundary	City of Seattle	570,000
Total		3,693,000

[1] Projects involve Federal participation.

Pending legislative proposals for joint endeavors by Federal Government and local utilities

Project	Local sponsor	Capacity
		Kilowatts
John Day [1]	Participation would be open to any applicant	1,105,000
Cougar [2]	City of Eugene	39,000
Green Peter [2]	Pacific Power & Light Co	96,000

[1] Readiness to finance entire power installation has been expressed by Portland General Electric, Pacific Power & Light, and Washington Water Power Cos.
[2] Sponsors listed have indicated intent to file for license if pending legislation is approved.

COMMUNICATION

Mr. ERDAHL. I have another letter from the Public Utility District No. 2 of Pacific County, which I would like to have included in the record, Mr. Chairman.

(The letter referred to follows:)

PUBLIC UTILITY DISTRICT NO. 2 OF PACIFIC COUNTY,
Raymond, Wash., June 15, 1955.

Mr. C. A. ERDAHL,
Chairman, Pacific Northwest Utilities Conference Committee,
Tacoma 2, Wash.

DEAR CLIF: I received your telegram regarding the Senate hearings set for June 20.

I definitely will not be able to attend these hearings and I am sure that your presentation will be satisfactory insofar as this district is concerned.

We share your thoughts regarding the restoration of the House cuts.

Best regards.

Sincerely yours,

ALLEN E. ROTTA, *Manager.*

PROBLEMS IN NORTHWEST

Mr. ERDAHL. Then I would like to briefly step to these charts and show you quickly what our problems are out there in the Northwest.

This chart represents the years 1955–56 to 1964–65. The red represents the prime power capabilities of hydro that we can get from our combined projects out there in the Northwest power pool, the west group.

The black represents the firm loads not met with hydro.

The upper part of those crosshatch section represents requirements not met for interruptible power based on the critical water year of 1936–37.

So if we had a critical water year this year we find that we would not quite meet the situation, but as we go into 1964–65 you will find that we have a deficiency, representing about 1,500,000 kilowatts at that particular point plus the interruptible power for mostly aluminum plants in our area that we feel should be met because we find that aluminum is important to the national defense and aluminum made with interruptible power means jobs for peole just as much as if it was firm power, at least we know that it affects our area.

Senator DWORSHAK. Does the black section come from steam power?

Mr. ERDAHL. This represents the estimated deficiency, Senator. It is a deficiency we are not able to meet with hydro.

Now, a certain amount of this could be met. For instance, we could meet almost all of this with steam, high-cost steam, but we still would have a million and a half kilowatts.

As you know, gentlemen, it takes from 8 to 10 years to build these projects. So we are in this situation here; and looking forward to the situation in 1960–61 we know that we are already late in getting some large major projects started if we are going to meet that situation.

FUEL USED IN STEAM PLANTS

Chairman HAYDEN. What do you use for fuel to generate steam in the Northwest?

Mr. ERDAHL. Mostly oil in the Northwest. There are some that we refer to as hogged fuel, wood waste, but it is mostly oil.

Chairman HAYDEN. Where does that oil come from?

Mr. ERDAHL. It is all shipped in, I think mostly from California.

Chairman HAYDEN. Are there any pipelines coming in?

Mr. ERDAHL. No, there are no pipelines to our area, Senator.

AVAILABILITY OF GAS

Senator DWORSHAK. You are going to have gas available soon. Will that relieve the situation any?

Mr. ERDAHL. There are some studies going on to determine possibly there will be off-peak quantities of natural gas that might be available for use in those projects and the brief explanation I have and the understanding I have is that that supply of gas might fit nicely into this situation at the time we need to run some of these steam plants.

Chairman HAYDEN. What is the source of that gas?

Mr. ERDAHL. The gas that is being proposed for the Northwest is from down, what we have referred to as the four corners, New Mexico, San Juan Basin.

There is an application now pending before the Federal Power Commission to allow a pipeline tie-in with Canada and Canadian gas may be used from the North.

So it will be gas from the North, from the Alberta fields, and the Peace River country, and from the San Juan Basin of New Mexico.

Senator DWORSHAK. The red section 1964–65 shows the maximum hydroelectric power which would be available from plants which are already in operation or those which are expected to be completed by that date.

Mr. ERDAHL. That is right, Senator.

Senator DWORSHAK. That black section indicates the anticipated deficiency?

Mr. ERDAHL. That is right.

Senator DWORSHAK. You do not think unless there is an acceleration of construction of multiple-purpose or hydro facilities that you can overcome that expected deficiency?

Mr. ERDAHL. For everything that is being planned and/or under construction, or that we know of right now, that is off the ground, unless something new comes in, this is the situation we will meet and here is the problem we face.

It graduates up to 1964–65, but starting in 1960–61.

Senator DWORSHAK. You will be even at the end of 1959?

Mr. ERDAHL. Really at the end of 1959 because we do get into an awfully tight spot at that point.

So we have very few short years to get something going. I would say that we are already late in getting one of these major projects started.

PROJECTS NEEDED

We have determined that we need the equivalent of the Priest Rapids project being started by the Grant County PUD, the John Day project, and the equivalent of the Libby project, started almost, you might say, immediately for the time that would be needed to build those projects to meet the power situation in the Northwest.

Senator ELLENDER. Do you have any difficulty as to any of these projects in finding a method to firm the power?

Mr. ERDAHL. With steam, you mean?

Senator ELLENDER. Yes.

Mr. ERDAHL. We have a statement on that, Senator, that Mr. Jones has prepared, because we remembered the talk you gave us a year ago.

I think Mr. Jones' statement will cover that if it is all right with you, Senator.

JOHN DAY PROJECT

SENATOR ELLENDER. In a minute, that will be all right.

Now, I notice here the John Day project which, as I remember, will cost $400 million——

Mr. ERDAHL. $310 million.

Senator ELLENDER. All right, I will take that figure, but I think it is $400 million. I notice in the table that you presented to us, that participation would be open to any applicant and that the readiness to finance the entire power installation has been expressed by Portland General Electric, Pacific Power & Light, and Washington Water Power Cos.

Under what circumstances would they be willing to do that?

Mr. ERDAHL. That is based on a bill that is before the Congress which has not as yet been considered, but if the Congress should pass the bill in substance——

Senator ELLENDER. What would be the attitude of the local people if such were to be built by these three private utilities?

Mr. ERDAHL. I don't know that I could speak for the group as a whole. I have heard some people say that that is not the way to proceed. I have heard many other public and private utilities say that that is the proper way to proceed, because generation built by anyone in the area would contribute to the development of the area's resources.

Senator ELLENDER. I thought that since there was such harmony in that area on interchange of power and so forth, that it might be well to give thought to that.

If you need the power as badly as you say you will by 1960, this one project, John Day, will produce 1,115,000 kilowatts.

Mr. JONES. Senator, may I say that the power commission of the State of Washington will be very glad to go in on a proposition like that.

AUTHORIZING LEGISLATION

Senator DWORSHAK. The bill is over in the House. Is that not the bill introduced by Congressman Coon to take care of John Day?

Mr. RODGERS. The bill has not been introduced. It is H. R. 4662. It is before the Public Works Committee of the House.

Senator DWORSHAK. It has not been reported out yet?

Mr. RODGERS. They have received reports from all the governmental agencies, no hearings as yet have been held.

Senator ELLENDER. As I recall, the John Day project is mostly a power-producing project, almost entirely so, and would lend itself to erection by privately owned companies.

Mr. ERDAHL. That is correct.

I am wondering since there is so much harmony in that area why that could not be done for the benefit of all concerned.

Senator DWORSHAK. Are you suggesting that private utilities might move in and build the entire project? I mean that project without partial State and Federal support?

Mr. ERDAHL. The way that bill is set up indicates that anyone, public or private in the area, could enter into a contract with the Chief of the Corps of Engineers and actually put up approximately $273 million, which would be the power costs of the John Day Dam, and if the Congress passes the bill, then it will be determined who would come in, public agencies, private agencies.

As Mr. Jones indicated, the State power commission of the State of Washington, which is a public agency, has indicated an interest in sitting down with the Chief of the Corps of Engineers if a bill like that is passed.

I have heard that there are public agencies who are interested in doing likewise on a prepaid power basis.

PLANNING FUNDS FOR JOHN DAY PROJECT

Senator DWORSHAK. Yes, but you have indicated in your statement that $500,000 for initial planning for the John Day project should be made available for the next fiscal year in order not to delay the construction of it.

Mr. ERDAHL. That is right.

Senator DWORSHAK. That is assuming any negotiations providing for the partnership plan or construction by private utilities, or whatever the ultimate decision may be, could take place while the actual engineering work is in progress so that there would be no delay of any kind?

Mr. ERDAHL. That is right.

Senator DWORSHAK. Is that your viewpoint?

Mr. ERDAHL. That is correct, Senator.

Senator ELLENDER. We have had quite a bit of testimony before us on this project and two Senators from Washington asked for $750,000 instead of the $500,000 in the budget so that the plans could be completed at an early date.

Mr. ERDAHL. We were told by the people out at the North Pacific Division of the Corps of Engineers that $500,000 was all that they could use. Whether that is correct, or not, I am not in a position to say, but they are anxious, and we are anxious, that they get it because under the terms of this bill, if it is passed, the way it has been submitted, the Army engineers would still be the ones to build the dam. They would be the ones to operate the dam. This would be the question of a prepaid power contract and the power output allocated to those public and private utilities who advanced the money.

Senator ELLENDER. It would still belong to the Government.

Mr. ERDAHL. That is right.

Senator DWORSHAK. But you need the money for engineering so that the engineers can proceed without delay?

Mr. ERDAHL. That is right.

Senator DWORSHAK. Do you know whether it will take approximately the full year to complete the present construction engineering?

Mr. ERDAHL. The Army engineers say it will take a year at least and if they run into no difficulties they could complete it within a year, but it would take a minimum of a year to complete that preliminary engineering.

Now, I would like to say again, regardless of who builds it or under what terms it is built, that planning money should by all means be made available so that there will not be that delay while you gentlemen consider the type of legislation and/or consider the appropriations by which that project would get started.

Senator ELLENDER. In regard to this matter I just spoke of, the 2 Washington Senators did ask for $750,000 and the engineers said they could use it very well if it was made available.

Mr. JONES. Wasn't it that they could cut the time down?

Senator ELLENDER. I do not know how many months they could cut, but they could advance it considerably by expending $750,000.

Mr. JONES. From 24 to 16 months, as I understand it.

Senator ELLENDER. The committee is going to give that consideration, I assure you.

Mr. ERDAHL. I wasn't aware of that situation, but if anything could be done to speed it up and see that no time is wasted, I wish you gentlemen would give serious consideration to it because time is of the essence on these problems that we are dealing with as I think you gentlemen can well see.

Senator ELLENDER. You folks are growing too fast down there. You ought to let some other areas develop.

Mr. ERDAHL. You know, actually it appears as though we are growing faster, but, gentlemen, the whole electric industry throughout the United States is growing rapidly.

I think perhaps you notice it more because you are in the picture out there in a bigger way than you are in some of the other areas of the United States, but if we could ever get ourselves to the points where we have a little surplus of power and really went out on a load-building program, I just don't think we would have a sheet large enough to show the load growth in our area.

Senator ELLENDER. What percentage of the power that is distributed in the Northwest comes from hydroelectric generation?

Mr. ERDAHL. With the exception of low critical water years, it is all hydro.

Senator ELLENDER. That is why you folks can get together so well?

Senator DWORSHAK. You have some steam plants?

Mr. ERDAHL. That is in the east group. Ours is in the west group.

Senator DWORSHAK. Just for firming?

Mr. ERDAHL. Firming up and for standby purposes. There is 400,000 kilowatts of steam in the west group area of the Northwest Power Pool.

Senator ELLENDER. My hope is that you folks can induce these privately owned utilities to build these steam plants and never come to Congress for any money to build steam plants in that area.

(Discussion off the record.)

Mr. WEGNER. Mr. Chairman, you will note that the load growth here is four to five hundred thousand kilowatts every year. In other words, we have to add 400,000 to 500,000 kilowatts just to stand still as far as the balance between power loads and power supply is concerned.

PERCENTAGE OF STEAM POWER GENERATED

Senator DWORSHAK. When Senator Ellender asked you about the amount of steam power used in the Northwest, you said 400,000 kilowatts. What percentage is that of the total power generated in the area?

Mr. ERDAHL. You mean on the kilowatt basis?

Senator DWORSHAK. Is it one-tenth, 8 percent, or 15, or what?

Mr. ERDAHL. It all depends on our water conditions.

Actually, our steam plants are used as standby, and 400,000 kilowatts of capacity is there for that purpose.

Senator DWORSHAK. What percentage would that be of your total?

Mr. ERDAHL. In a critical water year we would use much more steam. If we had planty of water, there would be very little steam used.

On the average, would you know approximately how much steam we might generate under normal conditions, just for outages and maintenance on our plants?

Mr. WEGNER. If you will permit me to make a guess, I would say less than 5 percent of the energy.

Senator DWORSHAK. That is what I thought. That is the big advantage they have in the Northwest.

Senator ELLENDER. Certainly. You take in the Tennessee Valley Authority, Tennessee, Alabama and Georgia, we started out there by erecting a facility to develop power from falling water. Today 70 percent of the electricity that is sold by that area is generated by steam; only 30 percent is generated by falling water.

That is why we had asked you folks last year and again this year to provide that firming power yourselves. We certainly do not want the Northwest to grow into the same situation that TVA has.

Under this TVA Act they just feel that because business is expanding there that Congress is obligated to keep on expanding the project no matter what this costs. They are wrong about that.

Mr. ERDAHL. I think on that point right now, Mr. Chairman, if I could ask Bob Jones to make his comments because he is speaking to that very subject.

Senator DWORSHAK. Before you leave that, has your group taken any official cognizance of the proposed Bruces Eddy development on the north fork of Clear Water River in Idaho?

Mr. ERDAHL. We have taken no action one way or the other except that our group has consistently taken the position that we support projects that can and will be built by the Federal Government, by public agencies, by private companies, or any combination thereof because we are really mainly interested in resource development for low cost electric energy in our area.

Senator DWORSHAK. You want to build not on the basis of blueprints, but to build in reality?

Mr. ERDAHL. That is correct.

Chairman HAYDEN. All right, Mr. Jones.

CITY OF SEATTLE

STATEMENT OF BOB JONES, COUNCILMAN, WASHINGTON; ALSO CHAIRMAN OF CITY UTILITIES COMMITTEE

GENERAL STATEMENT

Mr. JONES. My name is Bob Jones. I am a councilman of the city of Seattle and chairman of the city utilities committee of that city. I also serve as one of the five members of the Washington State Power Commission, being its secretary.

For the past 8 years I have come to Washington to testify as a member of the Pacific Northwest Utilities Conference Committee regarding the power needs and power situation of our area; therefore, I again endorse the statement of that conference committee in its entirety.

We in Seattle, like other electric utilities of the region, have spent large sums of money for expansion of electric facilities. For example, in the last 5 years we have spent $125 million for additions to our fast-growing electric system and have added some 400,000 kilowatts of generation. At this time we have another $26 million construction program underway.

These figures are given to show that we are doing our best to keep up with our needs, but with all this we must still buy power from Bonneville.

I urge that full appropriations be made so that those multiple-purpose projects under construction by the Corps of Engineers may go forward. I also urge favorable consideration of the budget requests for the operation and maintenance of the Bonneville Power Administration and that we have full cooperation from the Federal Government on those projects that the non-Federal utilities have under consideration.

The Washington State Power Commission also is doing everything in its power to meet the power situation in our area, and we all agree that Congress has done well by the Northwest in appropriations for power development and transmission lines in past years. But ever since the war it has been apparent that the needs for power in the area could not be met by Federal construction alone. It has also been apparent that beyond the needs for national defense that brought more rapid Federal development, the people of the Northwest could not expect to receive any more than a proper share of Federal funds for power purposes.

MCNARY AND CHIEF JOSEPH PROJECTS

It takes about 10 years to bring the large hydro projects to completion. The first two, McNary, and Chief Joseph started after the war, are now nearing that stage.

In the meantime public and private non-Federal projects cannot be expected to make their greatest contribution to power supply as a group until about 1960, 10 years after it became possible to get some such projects started.

The Bonneville system has rendered a real service in all these years in tying together all power sources of the area, not without getting the benefit, however, from doing the job both in the increase of power

supply and in the sale of that increase of power. Now, however, more than ever that transmission system must be available to tie in new non-Federal plants and to transmit all the power that can be produced from remaining Federal installations. Installations of generators that can still be made must also be kept going.

It is the responsibility of the State power commission along with all local non-Federal utility systems to pick up the load of meeting increasing demands for power.

There is also a need for some party like the Commission to be concerned with the public interest of all power users in the State as the danger of power shortage in the early part of the 1960's becomes more evident.

STEAM-ELECTRIC GENERATION

While local public and private utilities are taking up hydro construction, the Washington State Power Commission is stepping in to see if some stop-gap protection can be provided between the Federal and non-Federal hydro construction schedules by steam-electric generation. And, more than this, to see that the greatest possible use is made of any Federal secondary power that Columbia River water will produce through plants now on schedule.

Sale of that kind of power to be supplemented by steam power produced in the area would give the Federal Government extra revenue beyond the sale of firm power that justified building the projects. It would make use of the Federal generating and transmission system to the maximum extent, and most of all, it would help the people of the northwest and particularly of the State of Washington to help themselves to meet their power needs.

We have been talking about doing the job together for many years. We need a full measure of appropriations which have been requested for transmission facilities; we need full appropriations for completing chief Joseph, McNary, and the Dalles. We need planning money for John Day regardless of what the ultimate plans for financing and power sales may be. All parties are agreed as to this.

But we need another kind of help that will cost the Federal Government nothing but will allow maximum use of present facilities and give the Government more revenue.

The Commission will undertake to use the largest amount of secondary power which the river will produce and which can be used to serve the public, if that kind of power is made available at a right price, and supplement it with steam at our own local expense.

Senator ELLENDER. In that connection, how much more power would you generate and make useful if your suggestion were followed?

Mr. JONES. Senator, we have for the last year conducted one of the most exhaustive studies on steam generation in the Northwest that has ever been undertaken by any group. That is the State Power Commission.

Mr. Ward, who is our managing director, is trying at this time, and I think they have met with you fellows; have they not? The utilities?

Mr. ERDAHL. Yes.

Mr. JONES. That is public and private groups, they get their engineers together to see if it possible to take some of this secondary power not used, which is third and fourth class secondary power, and mix it with steam so that we can make firm power out of it.

That is the goal we have been working for in the last year if we can get the Bonneville Power Administration to help us out with this program.

Senator ELLENDER. Would Bonneville have the authority to act without any instruction from Congress?

Mr. JONES. I would say yes.

Mr. ERDAHL. I think they would.

Senator ELLENDER. It strikes me that Bonneville ought to readily work with you so as to at least make use of that so as to make more power available and to help meet this demand that you mentioned to us a while ago.

Mr. JONES. We have been working with Bonneville and we are also working with the engineers of all the different utilities in the Northwest in order to try to put steam and this secondary power together.

Senator ELLENDER. I wish you success.

Mr. JONES. We are working on it and will continue to work on it until we come to a solution.

DUMP POWER

Senator DWORSHAK. None of that dump power is being wasted now?

Mr. JONES. Some of it is, some of it is going over the dams at certain times.

Mr. Ward would like to get all the secondary power he can to mix it with steam and come out with firm power.

Senator ELLENDER. It would not cost the Government anything. On the contrary, it would relieve us of the burdens we are now carrying?

Mr. JONES. That is right, and increase your revenues.

Senator DWORSHAK. If that secondary power suddenly became unavailable, what would you do? You would have only your firming-up, peaking steam power.

Mr. JONES. That is true, but we would have new steam plants. The plants that we have now are pretty old and they are not as efficient as they might be.

We would have an efficient plant.

Senator ELLENDER. These plants would be erected by the——

Mr. JONES. By the power commission of the State which has the right to go ahead and build them.

Senator ELLENDER. Without the Federal Government's assistance?

Mr. JONES. That is right.

Mr. ERDAHL. I might say, gentlemen, that at our last meeting in Tacoma, we set up a task force headed by the State power commission, as Mr. Jones indicated, Mr. Ward, the managing director, and we have the word of Dr. Pearl, of the Bonneville Power Administration, the Corps of Engineers, and all of the generating public and private utilities in the west group area of the northwest power pool.

That purpose in meeting is to make this very study to determine how much of this dump energy would be available through the various stages of construction of hydro projects on the main stem and the tributaries of the rivers and not to determine necessarily who is going to build it, but to determine when it will fit nicely into the picture to,

No. 1, meet our load growth problem; No. 2, to help us keep our cost as low as possible.

That is what we think is necessary so that the Federal Government, the public agencies, and the private companies, or in effect, the people in our area, will have the maximum benefit out of our cooperative effort working together, and I think before we come before you gentlemen again we will have something definite to present to you in the way of a study that we hope that the Federal Government will participate in.

The only thing that seems to be necessary is for the Bonneville Power Administration to determine: No. 1, that the transmission grid would be used as a common carrier in the area, in the northwest power pool; and No. 2, that they would make this secondary energy available at a cost less than the going price of 2 to 2½ mills so that it can be blended with steam and keep the cost reasonably in line on a competitive basis.

COORDINATION OF TRANSMISSION POLICIES

Senator DWORSHAK. You have not had difficulty so far in coordinating the transmission policies, utilizing Bonneville power and private transmission lines, have you?

Mr. JONES. Dr. Pearl at a meeting of the Columbia Basin Interagency Committee and Power Policy Committee in Missoula 2 weeks ago, made the statement that they had determined administrative-wise that the power pool would be used for the benefit of all the utilities, public and private, in the area.

We think all of us that that approach is the best approach to get the maximum use of the investment of the Federal Government, the maximum use of the moneys by the public agencies and the private agencies and to see that nobody's money, public, private, or Federal, is spent unnecessarily, because the only way we are going to keep our power load is to keep the cost down to the minimum and no duplication of facilities.

Senator DWORSHAK. Maybe we ought to have some more missionaries go down to the southwest power section area. I mean on transmission lines.

Senator ELLENDER. I do not think you can compare the two areas.

Mr. ERDAHL. Now, the next one is Mr. George Rodgers, who is here representing the Pacific Power & Light Co., Portland, Oreg.

Do you have a statement you would like to present, Mr. Rodgers?

PACIFIC POWER & LIGHT CO., PORTLAND, OREG.

STATEMENT OF GEORGE RODGERS, REPRESENTATIVE

GENERAL STATEMENT

Mr. RODGERS. Yes.

Mr. Chairman and members of the committee, I am a member of the Oregon Bar and a member of the law firm of Smith, Gray, Hill and Rodgers, which firm is the general counsel for Pacific Power & Light Co.

First, I should like to corroborate Mr. Erdahl's statement that we subscribe, as a private utility company, wholeheartedly to the state-

ment of the Pacific Northwest Utilities Conference Committee, of which we are a member.

We collaborated in the preparation of that statement and are in complete accord with its import.

If I may at this point make a small correction, the number of the John Day bill is H. R. 5789. Since you gentlemen have expressed an interest in the bill, I should like to hand to the clerk for distribution to the members of the committee a brochure prepared by our company explaining the bill.

(Discussion off the record.)

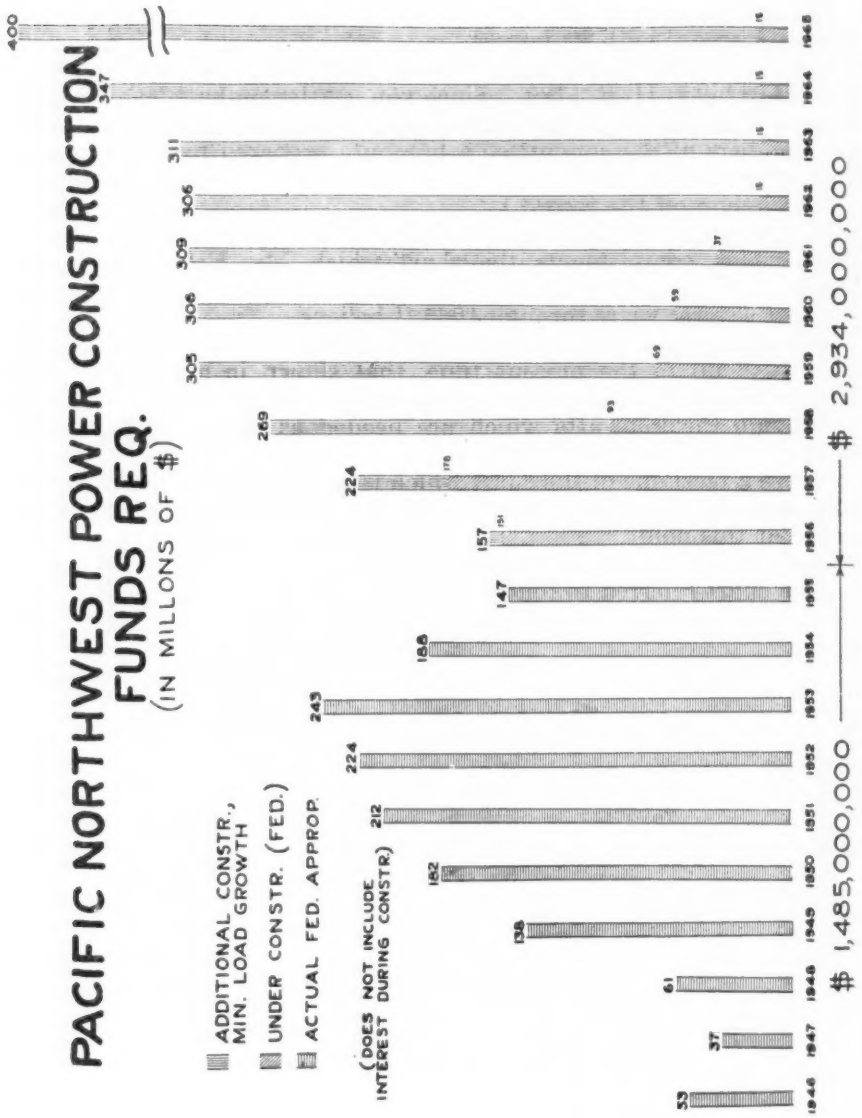
Mr. RODGERS. Gentlemen, we have placed on the easel there a chart which complements the chart which Mr. Erdahl explained. Mr. Erdahl's chart related to the actual kilowatt requirements for the next several years through 1965, I believe.

This chart shows the expenditures in dollars which have been made since 1946 up to the present time, that shown in green, and from then on blue and red indicate the expenditures that it will be necessary to provide the kilowatts which are needed as shown in the earlier chart presented by Mr. Erdahl.

I have a facsimile of the chart which is on the easel which I respectfully request the chairman's permission to have inserted in the record at this point.

Chairman HAYDEN. That may be done.

(The chart referred to follows:)


PACIFIC NORTHWEST POWER CONSTRUCTION FUNDS REQ.
(IN MILLONS OF $)
ADDITIONAL CONSTR., MIN. LOAD GROWTH
UNDER CONSTR. (FED.)
ACTUAL FED. APPROP.
(DOES NOT INCLUDE INTEREST DURING CONSTR.)
$ 1,485,000,000
$ 2,934,000,000

FEDERAL EXPENDITURES FOR POWER PROJECTS

Mr. RODGERS. Mr. Chairman, this chart shows the Federal expenditures for projects which have power features, such as multiple purpose projects, in the year 1946 to the year 1965, and is inclusive of expenditures actually made on the amounts budgeted for this fiscal year.

That is shown on the left of the chart, as I earlier indicated, in the green columns.

On the right-hand side of the chart is shown estimated amounts of money required at present price levels on a minimum basis in total to provide the facilities necessary to meet the loads in the area through the year 1965.

You will notice on the left the green bars collectively total $1,485,000,000 for an average of about $150 million a year for the past decade.

On the right the bars total $2,934 million, or nearly $3 billion, or an average for future requirements of $300 million a year, which is roughly twice for the next 10 years what has been spent in the past 10 years.

The subdivision of the bars in the right side show in blue the amounts of money necessary and estimated by years to complete the Federal construction now going on, including the necessary primary transmission facilities.

The total stacks by years, inclusive of the amounts needed to complete the existing Federal program and the additional amounts, are shown in red to be minimum power requirements.

This chart has been checked with respect to historic data with the Army engineers, with the Bonneville Power Administration, and with the various United States budgets through the years and is believed to be reasonably representative of the funds expended.

On the right a similar check has been made with respect to the blue areas. As I have said, the red represent the estimated costs based on the selection of dams that are possible of building in the Northwest and which are in various programs.

Now, I call your attention to the fartherest bar over, for the year 1965, to give you an idea of how the money requirements mount rapidly as the years go by.

You will notice it has reached the total of $400 million.

For the next year, which would be 1967, that would even reach higher, possibly approaching $500 million because not only is the load expanding, but the projects which are more economical have been constructed. Those, naturally are the combination of two kinds of things which will increase the money.

There is not any distribution in these figures. These are, as I have said, the cost of providing the generation facilities, the dams and powerhouses, and related multiple feature purposes that have to be built in with the structures and primary transmission lines.

INTEREST COSTS

There is one other point: These figures do not include interest during construction. I might say in comparison with future years the Bonneville Power Administration shows $3,500,000 as compared to this nearly $3 billion.

$1,485,000,000 — $2,934,000,000

The difference of estimated cost on certain dams and things of that kind is the reason for the difference in the figures, but they are of the same order of magnitude and reasonably close.

Now, I think that completes our statement with respect to that chart.

Senator DWORSHAK. Do you have any breakdown on those red lines as to the potential between private power company generation and Federal generation?

Mr. ERDAHL. That is outlined in that chart we put in the record, the proposed projects which could be built by various public and private agencies.

Senator DWORSHAK. To meet that total projected red line at the end of 1965?

Mr. ERDAHL. That could meet that situation which would call for cooperation and/or moneys on the part of the Federal Government to some extent.

PERCENTAGE OF FEDERAL FUNDS FOR JOHN DAY

Senator ELLENDER. I have been scanning over the John Day proposal here. I notice that only about 12 percent of the money needed to build the project would be furnished by the Federal Government.

Mr. ERDAHL. Correct.

Senator ELLENDER. Now, are you able to tell us whether or not the entire project would eventually cost the Government more than if the Government itself put the project up?

Mr. ERDAHL. There would be no reason for it to cost anything more regardless of how it was built because it would be built by the Army engineers in each case.

Senator ELLENDER. How about interest? Somebody is going to have to borrow money to build that project.

Mr. RODGERS. For the private utility companies or the municipals or public agencies which may make application for an allocation of power from the John Day project contemplates that we would borrow $273 million from lenders.

In the case of municipalities that perhaps would be lower; I mean the interest rate on the funds borrowed would be lower. We would advance that money to the United States and in return for that we would get power contracts which would be 50-year power contracts.

Senator ELLENDER. What you really do is pay for the erection of the project by advancing the money to the Government, and the power itself could be sold back to you in payment of whatever advance you make?

Mr. RODGERS. That is correct.

Senator ELLENDER. The question I asked is: Would the rate of interest charged be so much higher that it would cost the Federal Government a good deal more than if the Government built the project itself?

Mr. RODGERS. No; I don't believe so. You mean the overall cost of the dam be higher than if the private power companies built it in cooperation with the municipalities?

Senator ELLENDER. That is correct.

Mr. RODGERS. We do not believe so. It might possibly be higher. The overall savings of $273 million to the United States would far offset that.

There have been only two proposals with respect to John Day. One is full Federal construction and the other is the local interest participation in cost in return for prepaid power contracts.

COMPARISON WITH BONNEVILLE RATES

Senator ELLENDER. Would the rate paid for the power be about equal to that which is now being paid for Bonneville and other facilities in that area?

Mr. RODGERS. We think it would compare very favorably. The delivered cost to Portland, Oreg., would be 2.7 mills.

Senator ELLENDER. If this is to be owned by the Government and if it is to be operated by the Government, without having made a close study of it, it would seem to me that it is very palatable.

Mr. RODGERS. We think it is a very sound proposition

Senator ELLENDER. I think so, too. You could certainly accelerate production of power there probably 2 or 3 years, probably 4 years.

Senator DWORSHAK. Is it true the Army engineers would operate that dam?

Mr. RODGERS. The Army engineers would design and build the dam and operate it and the United States would own it.

Senator DWORSHAK. It would not operate the generating facilities?

Mr. RODGERS. It would operate the generating facilities and the entire dam would be integrated.

Senator ELLENDER. Those who would build this project would have the first right to purchase this electricity.

Mr. RODGERS. They have prepaid power contracts.

Senator ELLENDER. They have priority and preference on the electricity developed there?

Mr. RODGERS. Only to the extent that they agreed to advance funds.

PRIORITY OF COOPERATIVES

Senator ELLENDER. What about the priority given to cooperatives and to other agencies of government who would not participate in this? Would their priority be preserved?

Mr. RODGERS. That priority would be preserved in that the bill in one section provides that the city of Seattle, for example, could come in and make application to the Federal Power Commission for an allocation of power and would get an allocation of power in proportion to its proposed financial participation.

The preference clause as such is not referred to in the bill now pending.

Senator ELLENDER. But it would be possible for some of the agencies of government, such as REA, to be denied the preference they now have at Bonneville or at The Dalles, is that true or not?

Mr. RODGERS. As I said, there is no reference in the bill itself to a preference clause or to preference except that there are certain standards in making allocations of power which attempt to make certain that homeowners and residential users will get first call if they are otherwise qualified to finance a part of the cost of the project.

Senator ELLENDER. This proposal looks very attractive to me, and it ought to be looked into.

Senator DWORSHAK. Would it not be true that the non-Federal power participants in John Day would have complete control of the distribution of power generated at site?

Mr. RODGERS. That is correct. It would be under the complete control of the United States.

Senator DWORSHAK. That would not be true if the United States had it instead of the non-Federal power participants. There would be the two extremes.

Mr. RODGERS. First they would have to have the power contract.

Senator DWORSHAK. What I am trying to do is to obtain a more complete answer to Senator Ellender's question.

As I understand it, if a non-Federal power participant joined with the Government in controlling the power-generating facilities that non-Federal contractor would have complete control of the distribution of the power at site?

Mr. RODGERS. Would have the control of the distribution after they got the power.

Senator DWORSHAK. Would not it get 100 percent of the power?

Mr. RODGERS. Well, the bill provides——

Senator DWORSHAK. Before you answer, it would have jurisdiction over 100 percent of the power. I have not read the bill, but I am assuming that would be the case. The participant would have priority in furnishing its own customers through its own private distribution system as much power as the requirement called for and, then, if it had any surplus power beyond those requirements, that would be turned over to the Northwest power pool and be available to take care of the other customers.

Is that right?

Mr. RODGERS. That is correct, although I just wanted to make sure that I don't mislead the committee that there is no reference in the bill itself to the so-called conventional priority clause.

Senator DWORSHAK. You do not suppose Congress would pass a bill without having specifically stipulated how the power would be distributed?

Mr. RODGERS. I don't think this proposed bill is an agreement.

Senator DWORSHAK. If it is not, then it will stipulate what will be done with the power generated at site?

Mr. RODGERS. That is right.

Senator DWORSHAK. I think my colleagues on this committee and others want to know.

Senator Ellender says it looks on the surface as if it is a good bill, but I assume he would like to look into the details.

Mr. RODGERS. I agree that so far as John Day is concerned, John Day is authorized for construction, and it is authorized for construction by the Army engineers.

Then the Secretary of the Interior is authorized under the bill to enter into contracts for the sale of power.

As you correctly state, once that contract is entered into and we have power under that contract, it can be distributed according to the laws of the States in which a municipal or private utility operated.

Senator ELLENDER. Would it not be according to the contract?

In other words, if the city of Seattle contributed X dollars and they got X kilowatt-hours of the electricity generated, the city of Seattle would dispose of that power as it saw fit?

Mr. RODGERS. That is correct.

Senator ELLENDER. The same would prevail as to all other contributors?

Mr. RODGERS. That is correct.

Senator ELLENDER. Supposing there is something left over. Suppose there is power left over. What will become of that power?

Mr. RODGERS. We don't anticipate there will be any power left over because we already have enough groups to take on all the power and more if they can get it.

Chairman HAYDEN. This is a kind of "iffy" discussion.

(Discussion off the record.)

PREPARED STATEMENT

Mr. RODGERS. Gentlemen, the remainder of my statement, which I will hand to the clerk, relates to items in which the Pacific Power & Light Co. is particularly interested, the Alvey-Reston-McKinley facility.

I will hand that to the reporter.

(The statement referred to follows:)

In company with other operating utilities we have reviewed the Bonneville Power Administration request for funds for operation and maintenance and agree that the amounts requested are the minimum amounts necessary to provide good and reliable service and we urge their allowance.

With respect to the construction funds requested we have reviewed more particularly those items which are of particular interest to us and urge favorable consideration. In addition we respectfully call the committee's attention to item 134, the Alvey-Reston transmission facility. Load growth in this Oregon coast area has been very rapid. A special load survey made earlier this year indicates an even more rapid growth than had been supposed at the time the Bonneville budget was prepared last fall. Accordingly, Pacific wrote a letter dated April 15, 1955, to the Bonneville Administrator bringing this matter to his attention and urging an earlier completion date for this facility. I have a copy of this letter which I would like to present to the committee.

PACIFIC POWER & LIGHT CO.,
Portland, Oreg., April 15, 1955.

Dr. WILLIAM A. PEARL,
Administrator, Bonneville Power Administration,
Portland, Oreg.

DEAR DR. PEARL: Reference is made to our recent discussions relating to the power supply situation in the Coos Bay area. Because of indications of increased industrial activities, we recently made a special survey and find that consideration should be given to serving loads in addition to normal growth trends in the following categories in the Coos Bay-North Bend and Coquille-Norway areas:

PROBABLE LOAD ADDITIONS [Kilowatts]

Type of load	1955		1956		1957	
	Coos Bay area	Coquille area	Coos Bay area	Coquille area	Coos Bay area	Coquille area
Timber and associated industries	4,000	3,975	1,000	565	450	
Other industries				220	50	
Commercial			275			125
Total kilowatts	4,000	3,975	1,275	785	500	125

POSSIBLE LOAD ADDITIONS [Kilowatts]

Timber and associated industries			9,300	2,000	13,500	2,000
Other industries						
Commercial						
Total kilowatts			9,300	2,000	13,500	2,000
Total for area, kilowatts	7,975		13,360		16,125	

The addition of the probable loads to our forecast as submitted December 27, 1954, indicates estimated peak loads for the 1956–57 and 1957–58 winter seasons of 52.8 and 56.1 megawatts, respectively. Including those additional loads indicated as possible results in estimated peak loads of 63.8 and 82.1 megawatts, respectively.

Indications are that the so-called normal load increases may be higher than was estimated. Thus, we are faced with an extremely critical situation requiring relief at the earliest possible moment by completion of the Alvey-Reston-McKinley 230-kilovolt line. Although it is needed now, it is recognized that it will not be possible to complete construction this year. However, it should be possible to complete Reston-McKinley section by October 1956, as was discussed with you yesterday, and to complete the Alvey-Reston line for 115-kilovolt operation in October 1956, with 230-kilovolt operation by fall of 1957.

Obviously the funds in the total amount necessary to complete the Alvey-Reston-McKinley line for operation at 230 kilovolts should be obtained this year.

Very truly yours,

E. ROBERT DE LUCCIA,
Vice President and Chief Engineer.

The Tillamook transmission line, item 325, is also most urgently needed, and on April 15, 1955, we wrote to the Administrator advising that the power-supply situation is extremely critical in the Tillamook, Oreg., area and pointing out that recent transmission-line outages have resulted in serious interruptions to service. I have a copy of this letter for the committee:

PACIFIC POWER & LIGHT CO.,
Portland, Oreg., April 15, 1955.

Dr. WILLIAM A. PEARL,
Administrator, Bonneville Power Administration,
Portland, Oreg.

DEAR DR. PEARL: As you are aware, the power-supply situation in the Tillamook area has been and is extremely critical. Recent outages of the existing Bonneville Power Administration line have resulted in serious interruptions to service. The capacity of the existing transmission line together with local generation in the Tillamook area will be unable to meet the December 1955 load. In view of this situation we again urge that the Gales Creek-Tillamook transmission line be completed at the earliest possible date and in no event later than November 1, 1955.

Very truly yours,

E. ROBERT DE LUCCIA,
Vice President and Chief Engineer.

It should be noted that the Alvey-Reston and Tillamook facilities are considered a part of the Bonneville grid and early completion is essential for the benefit of BPA customers in the Coos Bay and Tillamook districts.

GENERAL STATEMENT

Mr. RODGERS. Included in the statement is a table giving some of the financial and kilowatt data with respect to the areas in which we would like to see transmission lines built to relieve a shortage along the coastal area in the Coos Bay, Oreg., and Tillamook, Oreg., areas.

I would like to conclude my statement by saying this, that we also urge upon this committee favorable consideration for planning funds for such projects as John Day, the $500,000 for the Cougar project on the McKinsey River in Oregon, the Green Peter project on the Sandy River in Oregon, each of which we believe should be started in the very near future.

In each of these cases, each of these projects, non-Federal funds are available to assist in the construction of these projects and legislation to authorize the construction is pending before the Congress.

There is also legislation pending on Green Peter and Cougar.

Senator DWORSHAK. They are all in the House?

Mr. RODGERS. They are all in the House.

As you know, we have a tremendous job before us in the Pacific Northwest. We need the help of everyone and everyone who is able and willing to contribute to the solution of our regional power problem should be permitted and encouraged to go to work.

I join Mr. Erdahl and the other members in thanking the committee for the way they have treated us in the past and for the generous assistance that the Congress has given the Pacific Northwest in the development of the water resources.

I may say one thing, that the public works appropriation committee bill as it did pass the House, carried planning funds for the Cougar project, but did not carry any planning funds for the Green Peter project.

Those two projects are all part of the Willamette Valley flood-control development project and are the only two remaining projects to round out that project.

We think that this committee should put into the bill it reports somewhere between $200,000 and $250,000 to complete planning of the Green Peter project because they are both integral parts of the same program.

I want to thank you very much, Senator.

Mr. ERDAHL. Next, I would like to call on Art Wegner, representing the Washington Water Power Co.

Mr. WEGNER. Thank you, Mr. Chairman.

THE WASHINGTON WATER POWER CO.

STATEMENT OF A. H. WEGNER, REPRESENTATIVE

GENERAL STATEMENT

Mr. WEGNER. My name is A. H. Wegner. I appear here as the Washington Water Power Co.'s representative on the Pacific Northwest Utilities Conference Committee.

The Washington Water Power Co. has been a member of the conference committee since its beginning in 1946, and on numerous occasions representatives of the company have appeared before committees of the Congress in support of appropriations for the construction and operation of power generating facilities by the Corps of Engineers, as well as appropriations for the construction and operation, by the Bonneville Power Administration, of such power transmission facilities as are necessary to transmit power to the principal load centers of the area.

Earlier this year we, with other utility members of the conference committee, were given an opportunity by Bonneville to discuss and review with them the operation and maintenance program of the Bonneville system, as well as the transmission facilities proposed to be provided by funds requested for the fiscal year 1956.

SUPPORT FOR BONNEVILLE APPROPRIATIONS

We appear here today to invite and recommend your approval of the funds requested by Bonneville so that it will be able to help meet the power requirements of the area by providing and operating transmission facilities related to the additional generation being constructed by the Corps of Engineers of the Department of the Army.

Engineering personnel of the utility agencies of the Pacific Northwest, charged with the responsibility of power supply, agree that as the area continues to grow at the rate that it has in recent years, it will require substantial amounts of additional generation in the period beginning in 1961 if all the load of the area is to be carried in the event of low streamflows.

It is natural, therefore, that most of the utility agencies are aggressively working on programs to expand their power generation and transmission facilities, just as our company is doing.

While as recently as 1952–53 our company constructed and placed in operation the 200,000-kilowatt Cabinet Gorge hydro plant and the transmission facilities related thereto, in May of this year the Federal Power Commission granted us a license to construct a 400,000-kilowatt project, estimated to cost approximately $79,500,000, at the Noxon Rapids site on the Clark Fork River in western Montana.

We hope to be able to initiate work on the beginning phases of that project during the remainder of this year so that the added generation will be available to help meet the area's power needs in 1960.

We have also been working on a program to implement the area's power resources in the amount of 125,000 kilowatts by constructing transmission facilities to enable us to purchase from our neighbors in Canada some power that may be surplus to their needs.

To further increase the future power supply of the area, we have joined with other utilities in forming the Pacific Northwest Power Co., a generating company, for the purpose of constructing and operating larger hydro generating projects on the Snake and other rivers.

Power from these additional projects, as well as power from projects constructed by other utility agencies will be available to the area through the operation of the northwest power pool.

These efforts of our company and those of other utility agencies are not expected to be sufficient to supply, on a firm basis, the needs of the Pacific Northwest region 5 years hence, and it is for this reason that we appear here to join in and support the statement of the Utilities Conference Committee that Mr. Erdahl has given you in behalf of appropriations requested.

May I conclude by saying that we join wholeheartedly in that statement.

Mr. ERDAHL. We have one more very brief statement, Mr. Chairman, by Mr. Millsap, vice president of the Portland General Electric Co.

GENERAL ELECTRIC CO., PORTLAND, OREG.

STATEMENT OF RALPH H. MILLSAP, VICE PRESIDENT

GENERAL STATEMENT

Mr. MILLSAP. Mr. Chairman, in the interest of maintaining your schedule, I am going to keep my remarks very brief and state nothing more than wholehearted endorsement of what Mr. Erdahl has told you.

I would like to comment briefly, however, on the interest which Senators Ellender and Dworshak expressed in the John Day legislation and say in that connection that the three private utilities repre-

sented here by myself and Mr. Rodgers and Mr. Wegner, if they are to proceed with the program that they have immediately ahead of them in constructing almost 2½ million kilowatts of power projects at a cost of very close to three-quarters of a billion dollars—that is our contribution to solving our problem out there—we must have some sympathetic consideration in the Congress of certain legislation that is now pending, including the John Day bill and bills for the construction of Green Peter and Cougar projects.

I ask consideration of that when those things are before you.

I am very pleased at the interest shown in the John Day bill, Senator, and I assure you in due course there will be answers made to all the questions you raised and others I am sure you will want to ask when hearings are held on them.

Thank you very much.

Mr. ERDAHL. Thank you, Mr. Millsap.

On these Bonneville cuts and if I can briefly cover 1 or 2 of them, first I would like to turn over to the clerk for insertion in the record, a letter from the Public Utilities District No. 1 of Grays Harbor County, and that is with reference to the Bonneville line in the Bonneville budget, item 209, $100,000 requested for getting the project started from that line from Olympia to Aberdeen.

He has outlined his problems and we as a committee would urge you to give full consideration because they do have a power requirements contract from Bonneville and it looks very evident that unless you do set up the money the people down in that area will not be allowed to get their fair share of the power for their growth on the same basis that other people are in the rest of the area.

So we urge that you give very serious consideration because the loads are growing to the extent that if it is not granted for this year, Bonneville will not be able to build that line quickly enough to pick up the load growth in that area.

(The information referred to follows:)

PUBLIC UTILITY DISTRICT NO. 1,
GRAYS HARBOR COUNTY,
Aberdeen, Wash., June 14, 1955.

Mr. C. A. ERDAHL,
Chairman, Pacific Northwest Utilities Conference Committee,
Tacoma, Wash.

DEAR CLIF: We were quite concerned when we heard that the appropriation for the second line from Olympia had been cut out from the budget. Especially when we now have a large pulp and paper concern going into Cosmopolis. Understand they expect to spend $20 million and our present facilities will not be adequate to handle this additional load when it is needed 2 years hence.

We have also just heard that another large pulp and paper concern will be taking over a millsite on the south side. Their load will be in the neighborhood of 16,000 kilowatts. Also, Rayonier Inc. will add an additional 3,500 kilowatts within the next 2 years. This is over and above the 10,000 kilowatts which will be added this fall.

Since it takes some time to acquire rights-of-way, it is very important that the appropriation be reinstated; otherwise, we will find ourselves in a position of not being able to give service and the possibility of these large concerns pulling out. It would, therefore, be greatly appreciated if you would do everything possible to convince the authorities that the additional line is very necessary for the advancement of this community.

Yours very truly,

F. J. ROBBINS, *Manager.*

HOUSE COMMENT

Senator HAYDEN. You do not agree with the statement of the House, which is:

Reductions achieved by the committee in the construction program of the Bonneville Power Administration are based on application of unobligated and unexpended balances and certain minor program reductions. The committee has deleted the request of $42,000 for a study in the upper Olympic Peninsula service area as well as a request for initiation of construction of a 115-kilovolt line between Olympia and Aberdeen. Present and forecasted loads in these areas do not indicate the necessity for the items at this time.

You do not agree with that statement?

Mr. ERDAHL. We don't agree with that statement with regard to the Olympia-Aberdeen line and that is covered by the letter of Mr. Robbins of the Grays County PUD.

We also take the same position with regard to the item 204 for the $40,000 for the upper Olympia Peninsula.

Chairman HAYDEN. The loads will be there?

Mr. ERDAHL. The loads will be there.

Chairman HAYDEN. The House doubted it. For that reason these items were deleted.

I have received a letter for Congressman Russell V. Mack concerning this matter. I think his letter should be included in the record at this point.

(The letter referred to follows:)

HOUSE OF REPRESENTATIVES,
Washington, D. C., June 17, 1955.

Hon. CARL HAYDEN,
Chairman, Senate Committee on Appropriations,
United States Capitol, Washington, D. C.

DEAR SENATOR: The Bonneville Power Administration has asked and the Budget Bureau has approved an appropriation of $100,000 to start acquisition of right-of-way and advance planning on a new powerline from Olympia to Cosmopolis, Wash. The House Appropriations Committee, however, deleted the item from its bill. The ultimate cost of the completed line will be $1,200,000 spread out over a several-year period. Since the House committee's deliberations the Weyerhaeuser Timber Co. has announced plans for immediately starting construction on an 850-acre site of a $20 million pulp mill that will employ 300 people at Cosmopolis. This mill will have a power demand for 16,000 kilowatts of electricity and this additional powerline is absolutely necessary to supply the power needs of this mill and to take care of the steadily increasing power demand in this rapidly growing industrial area.

Bonneville Power is the only power available in this entire area. There is no power from any other source.

The proposed new line will serve the entire Grays Harbor area, which is composed of the industrial towns of Aberdeen, Hoquiam, and Cosmopolis and has in this service area a population of about 60,000.

Unless this new line is completed by late 1957 the entire Grays Harbor area with its many paper, lumber, furniture, plywood, and other industries and 60,000 people will suffer a power shortage that will adversely affect employment.

This new pulp mill affords a highly desirable and profitable outlet for Federal power, since pulp mills operate steadily 24 hours a day and 365 days a year. This type of power user is the most desirable. Also, such a mill provides high employment in proportion to the power consumed. A pulp mill, such as the one Weyerhaeuser is building at Cosmopolis, will employ 300 people on a 16,000-kilowatt consumption of power while an aluminum reduction plant making pig aluminum uses 10 times that much power, or 160,000 kilowatts, to provide jobs for the same number of persons, 300.

There is a further reason why this $100,000 item for the Olympia powerline should be provided. That reason is this:

The Federal Government owns in the area immediately tributary to this new pulp mill about 20 billion feet of timber which is being marketed by the Federal

Forest Service on a sustained yield principle. Last year, the Federal Government sold $1,688,904 of timber from the Federal sustained-yield forest in this area.

A pulp mill uses the lower grades of timber, the type of trees not suitable for lumber or other forest products. It is this timber that is most difficult and sometimes impossible to sell.

The establishment of this pulp mill in the area adjacent to such large stands of timber as the Federal Government owns in this area, will tend to cause the Federal Government to have a better market and therefore get a better price from its lower grade timber. Since the Federal Government owns so much timber in this area, and by logging it on the sustained yield principle will be selling trees from this area for a hundred years or more, the benefits to the Federal Government indirectly derived over the years from this powerline will be enormous.

As a result of the urgent need for this powerline which has come about in the last few weeks by the decision of the Weyerhaeuser Timber Co. to build this $20 million pulp mill at Cosmopolis, I earnestly hope the Senate committee will approve this Olympia-Aberdeen 115-kilovolt line in the public works bill now under consideration by your committee.

Unless a start is made on this Olympia-Grays Harbor powerline this year by a modest appropriation of $100,000, to obtain the right-of-way and do preliminary planning, great hardship may be worked on this area.

Sincerely yours,

RUSSELL V. MACK, *Member of Congress.*

Mr. ERDAHL. We feel that the loads will be there and Bonneville should have sufficient money and/or authority to get started on those two items immediately.

The other item that we want to speak to very briefly is the $150,000 of operation and maintenance money that was deleted by the House for the Bonneville appropriation. We feel this way: That we have a power pool out there operating, of which the Bonneville Power Administration is a very important part.

We are quite satisfied, having gone over these items with Dr. Pearl and his staff, that he has a very close figure and as we have indicated in our statement, we feel that there should be sufficient flexibility in the budget to allow Bonneville to operate as a utility because should they not be able to keep their maintenance up on those lines, anything that would happen to their line is going to affect the entire area.

So we urge you very seriously to consider that $150,000 item. It is not much when you are talking about the $6 million, but we have gone over those figures with Dr. Pearl and his staff and we feel that if anything he has gone just a little bit too close to make a good operating figure for a good power pool operation which so materially affects us.

We urge you very carefully to consider those items.

COMMUNICATION

Now, Mr. John Dixon, the manager of the Wahkaikum County PUD, was to have a statement to be included in the record. I think it will be at the hotel when I return. Could we put that in the record.

Chairman HAYDEN. If you can get it up here by tomorrow, we will.

(The statement referred to follows:)

LONGVIEW, WASH., *June 20, 1955.*

C. A. ERDAHL,
Mayflower Hotel:

Hope this does not arrive too late. Wahkiakum PUD fully supports statement of conference committee also commissioners have appropriated $5,000 to be used for stream gaging on Grays River toward proposed study by Army engineers indicates we are ready and willing to spend our dollars toward cooperative development of this project.

JOHN S. DICKSON, *Manager.*

Mr. ERDAHL. Now, one more item. We have out there a schedule X put together by the Army engineers and Bonneville which outlines the need for keeping these appropriations by the Federal Government up at least to this as a minimum. Otherwise, we are going to find ourselves in a situation where before 1960 and 1961 we are going to be in a tight situation powerwise.

Now, anything that does not meet as the minimum schedule X is going to put us in a position that we don't think by our own efforts, combined or otherwise, we will be able to correct. And if in checking this bill and before you mark the bill, if you would be kind enough to check to see that both from the standpoint of Bonneville and the Corps of Engineers that they can meet schedule X, then that would be the minimum that we think we have a right really to expect from the Federal Government.

We hope that you will not go to that low level, but continue that as a minimum.

Gentlemen, that completes our statement. We thank you very much for your interest and your consideration. We have held you here longer, but there were some questions that you wanted us to answer and we hope that we have covered the field for you. We hope that we can work this problem out, the Federal Government local public and private agencies, and see cooperatively if we can meet that money problem in the Northwest to see that the people in the area will have adequate low-cost power so that we can go forward in that area.

We are not asking you to do the whole job. We are asking you to do a job of cooperation with us.

I assure you, Senator Ellender, that we will work out this steam problem and, I think, to your complete satisfaction.

BASIC POWER ISSUES

Senator DWORSHAK. As I sit here throughout the extended hearings as a member of your subcommittee, I have an opportunity to observe the many controversies which we confront in various sections of the country dealing with the basic issues of the power.

So I am very proud of the progress which has been made in the Columbia River Basin. I certainly want the record to show that.

The various groups and individual groups particularly that cooperate in the Pacific Northwest Utilities Conference Committee should be commended for the success which they have experienced in the generation and distribution of power.

Chairman HAYDEN. We have been grateful to them for years.

Senator Barrett, we would like to hear from you.

STATEMENT OF HON. FRANK A. BARRETT, A UNITED STATES SENATOR FROM THE STATE OF WYOMING

OWL CREEK PROJECT, WYOMING

Senator BARRETT. Mr. Chairman, I am appearing here in support of an appropriation for the Owl Creek project in my State. That project will supply supplemental water to 17,676 acres of land and will rehabilitate and extend the canals and laterals that will serve 4,400 acres under pumping unit.

As a matter of fact, Mr. Chairman, we were allowed an appropriation for this project in 1950 amounting to $960,000, but unfortunately the project becomes involved in litigation because many oldtime settlers strenuously objected to the provisions of the 160-acre limitation act.

The case went to the Supreme Court and as a result the funds were transferred to other units in the Missouri Basin project.

As a matter of fact this project was one of the initial projects authorized under the Flood Control Act of 1944. Estimates were sent up by the Bureau of Reclamation and by the Bureau of the Budget 6 years ago. It is in an entirely different position than most any other project.

Now, they have had a drought for the past 3 years in this area and they need this project in the worst way. It is one of the best projects in the Missouri Basin.

The Bureau of the Budget, I am quite sure, would be favorable to the project, but they have been waiting for the execution of the repayment contract. That contract has been prepared and will be executed very shortly. The contract is quite agreeable to the people on the project.

The new repayment contract will call for an 8-percent higher repayment than did the contract of 1950.

If we had an appropriation of $900,000 at this time we could get this project underway. It is a very small project. The total cost will be $3,352,000, to be exact.

Already, $750,000 has been spent on the project. All of the difficulties on the project have been ironed out and last year the Congress enacted my bill to remove the provisions of the 160-acre limitation act from the project.

This project is very necessary, Mr. Chairman; the people in the area have been drought-stricken for 3 years and they need this project in the worst way. I hope that notwithstanding the fact that there is not a budget estimate for this, that in view of the fact that it has been appropriated for before and that the Bureau of Reclamation favors the project, that you can see your way clear to put in an item of $900,000 for this project.

Chairman HAYDEN. Will you ask the Bureau to submit a justification.

Senator BARRETT. Yes; the Bureau has already sent up a justification. I am hopeful that the Bureau of the Budget will have no objection to the appropriation as soon as the repayment contract is executed.

Senator ELLENDER. For your information, Senator, I understand that the House of Representatives has seen fit to put a few unbudgeted items in the bill. So we expect to do the same thing at this end.

Senator BARRETT. I am mighty pleased to hear you say that, Senator Ellender, in view of the fact that the House has approved items for projects without requests from the Bureau of the Budget, that the Senate will do the same thing. I think you are entitled to take that action. This project, as I said before, is in a class by itself by reason of the fact that the Congress had previously approved appropriations for this project, and especially in view of the fact that it is a relatively small project. Mr. Chairman, permit me to add certain resolutions, wires, and letters that I have received asking for this appropriation. Thank you, Mr. Chairman.

THERMOPOLIS, WYO., *June 17, 1955.*

Hon. FRANK A. BARRETT,
Senate Chambers, Washington, D. C.:

Owl Creek, in drought area, short on livestock forage. Farmers in proposed river pumping area now using large portion owl Creek flow. Depriving upper section late rights. Proponents consistent in requesting funds being reinstating this session; residents lower area impatient. Must keep the project intact.

L. F. THORNTON,
Member, Irrigation Committee, Wyoming National Resources Board.

THERMOPOLIS, WYO., *June 14, 1955.*

Hon. FRANK A. BARRETT,
Senate Office Building, Washington, D. C.:

Urge you to leave no stone unturned to secure appropriation this session for Owl Creek project. Three years of drought has placed project area in desperate condition. Another year of water failure will jeopardize many families and other business in county.

A. S. INGRAHAM,
President, Thermopolis Chamber of Commerce.

WORLAND, WYO., *June 13, 1955.*

Senator FRANK BARRETT,
Senate Building, Washington, D. C.:

Entire community evidently solid behind an appeal for funds to begin work on installation of pumping units for the Owl Creek project in Hot Springs County, Wyo. Action urgently needed to save farms and livestock due to drought. Let's have what we have as well as supporting new farm units in area.

WORLAND ROTARY CLUB.

WORLAND, WYO., *June 12, 1955.*

Senator FRANK BARRETT,
Senate Office Building, Washington, D. C.:

We urge funds be made available immediately to start work on the Owl Creek project in Hot Springs County, Wyo. This is second year of drought for the territory and unless project is started now, many farmers and stockmen will lose their land and livestock.

ROBERT SMITH,
President, Worland Chamber of Commerce.

CODY, WYO., *June 13, 1955.*

Hon. FRANK A. BARRETT,
Senate Office Building, Washington, D. C.:

Completion of Owl Creek project vital to entire Big Horn Basin. Earnestly and urgently petition you exert all possible means for procurement of project appropriations this session.

CODY CLUB,
Cody Chamber of Commerce.

CASPER, WYO., *June 15, 1955.*

Hon. FRANK BARRETT,
Senate Office Building, Washington, D. C.:

Strongly urge appropriation funds for Owl Creek project. Can be one of Wyoming's finest, most economical projects.

DARRELL BOOTH,
Manager, Casper Chamber of Commerce.

RESOLUTION

Whereas the Owl Creek Irrigation District has been organized, for the purpose of bringing water for irrigation to the ranches and farms in the Owl Creek area, as well as lands adjacent thereto; and

Whereas the bill atuorizing the construction, and appropriating the funds, for purpose of providing the necessary water storage facilities, to impound the runoff waters of upper Owl Creek will be before the Congress; and

Whereas the construction and completion of the project, for the purpose of bringing into actual operation of the Owl Creek Irrigation District, will provide mutual benefit to both participants and citizens generally, throughout the Big Horn Basin, and contribute to the economy and welfare of the State of Wyoming; and

Whereas the commissioners of the district, composed of Willard V. Wilson, chairman; Roy Collins, and William Stewart, members, have presented to the members of the Thermopolis Rotary Club, by illustrated lecture, the history of the efforts of the citizens of the Big Horn Basin, to make the district a reality; also setting forth the numerous benefits that are to be derived and made available, upon completion; and

Whereas the members of the Thermopolis Rotary Club, in a standing vote, have voted unanimously as being in favor of the aims and purposes of the district: Therefore be it

Resolved, That the Thermopolis Rotary Club, express by resolution its approval of the purposes for which the district has been organized; and be it further

Resolved, That the Thermopolis Rotary Club, joins with the district group, as well as with the citizens of the Bighorn Basin in urging for an early completion of the project; and be it further

Resolved, That a copy of this resolution be prepared and delivered to each chamber of commerce or commercial club throughout the Bighorn Basin area; and be it further

Resolved, That a copy of this resolution be mailed the Wyoming Representatives in Congress, Senator Joseph C. O'Mahoney, and Senator Frank A. Barrett and Congressman E. Keith Thomson; and be it further

Resolved, That the Thermopolis Rotary Club, express by resolution, its sincere appreciation to the Owl Creek District Commissioners, for their excellent presentation and timely lecture on the history of the project, together with describing numerous benefits, that are anticipated when and if completed, and, that a copy of this resolution be delivered to the commissioners of the district; and be it further

Resolved, That a copy be spread upon the minutes of the Thermopolis Rotary Club.

THERMOPOLIS ROTARY CLUB,
W. S. BLACK,
T. E. DELANEY,
C. J. DEVEREAUX,
Resolutions Committee.

THERMOPOLIS, WYO., *June 18, 1955.*

Hon. FRANK A. BARRETT,
Senator of Wyoming,
Senate Building, Washington, D. C.

DEAR SENATOR BARRETT: I was very happy to learn that our representatives in Washington, both in the Senate and in the House of Representatives, are in favor of working on the Owl Creek project in Wyoming. As an agricultural agent in Hot Springs County, I really think that this would be a project that would be helpful not only to the people in the immediate Owl Creek area, but in the neighboring business communities.

Yesterday I talked with one of the car salesmen and he stated that he is behind 7 pickups in his sales in 1954, and he has not sold one pickup to a farmer this year. This trend runs in relation to the other business of the Thermopolis communities.

1954 had a new low in reinfall in our county or 5.2 inches; 1902 had held the record until this date with a rainfall of 6.68 inches. Our normal rainfall is 12.72 inches. To date for 1955 we are 61 percent of normal or 4.69 inches of rainfall. With a shortage of rainfall in our area as it has been in the last few years our underground water supply has also lessened. Checking the few irrigation wells we now have in operation in the county we find that they are 10 feet below 1954.

Our crops in the county have been influenced. The alfalfa suffered a dry winter and I would estimate about a 50 percent crop of 1954. This is due to winter freezing. We have no carryover as we had in 1954 so the amount of alfalfa that is raised in 1955 will be all that we have.

As to grain we have a number of farmers on Owl Creek that have not turned a plow furrow. They have saved all water that would be their share to irrigate their alfalfa, but this does not mean that all of them have received water. Those water rights prior to 1900 are the only ones that have received any water as of to date. Those prior to 1896 have received up to 4 days of irrigation. Earlier water rights, which are few, have received much more water than the later water rights.

In the Owl Creek area as of to date I count 40 percent of them that have sought employment in other localities to maintain livelihood. They have sold their basic herds so they will be able to take on these other jobs. Others will have to do this before the season is over. Some of them have secured employment in the town of Thermopolis and in the county oil fields and a few have had to leave the county to find work.

We have already received notification from the truckers that they have shipped some of the basic herds out of the county in 1955. This is because we do not have ample feed on the range to carry them over during the summer and into the winter months.

I join with the farmers and the businessmen of Thermopolis in giving our appreciation for anything that you can do to help us with this project.

Sincerely yours,

DON H. TIPPETS,
County Agricultural Agent,
Agricultural Extension Service.

THERMOPOLIS, WYO., *June 18, 1955.*

Hon. FRANK A. BARRETT,
Washington, D. C.

DEAR SIR: Farming in the Owl Creek area is the toughest job I have ever had. Money that I have invested in seed I have lost to raise feed for cows that I have had to sell. I haven't irrigated my place for 2 years because of lack of water. All I have now is a pasture but I don't have any money to buy livestock or seed. I really don't think it is worth spending money until I can be sure that I can have water to irrigate my cropland.

I believe, as most of us on the creek, that the Anchor Dam would be of invaluable help to this community. We need it and ask your help in obtaining it.

Thanks.

Yours truly,

MERRILL M. BROWN.

THERMOPOLIS, WYO., *June 18, 1955.*

Senator FRANK BARRETT, OF WYOMING,
Washington, D. C.

DEAR SENATOR: Having farmed and ranched in the Owl Creek area for quite a few years, I realize the definite need for construction of Anchor Dam. The need for water for irrigation is acute and if the people of the creek area cannot be supplied, there will be many who will lose all they have ever had. Some of these people have already given up and started out to try and find other work, giving up the home in which they had lived for years.

I am hoping, along with many others of Owl Creek, that you can do something to get the Anchor Dam built for the good of the community. Anything you can do, I am sure, will be greatly appreciated by all of us.

Yours truly,

MOSE MELLOR.

THERMOPOLIS. WYO., *June 18, 1955.*

Senator FRANK BARRETT, OF WYOMING,
Washington, D. C.

DEAR SENATOR: We farmers and ranchers in the Owl Creek area are going through one of the worst drought periods we have ever had. Most of us have had to sell all but our breeding herds and calves from this year. There is no hay and things are in a sad state for lack of water.

Most of us up the creek feel that if the Anchor Dam was construc ed, it would be one of the greatest things this little community has ever had. Most of us have lived on these places for a number of years and certainly do not want to give up what we have worked so long for, but we cannot live on barren land and we feel that perhaps you and your workers can help put across the the Anchor Dam project.

Thank you, Senator Barrett.

Very sincerely yours,

LESLIE W. THRONBURG.

LUCERNE, WYO., *June 18, 1955.*

Senator FRANK A. BARRETT,
Senate Chambers, Washington, D. C.

DEAR SENATOR BARRETT: Your letters received and your efforts appreciated. Work on the contract has moved fast as you requested. The contract has been cleared by the Bureau of Reclamation office at Denver. Mr. Clinton of the Billings office arrived in Washington, D. C., June 16 for the purpose of working on this project. We have sent letters to Mr. Howard Hughes, telegrams to Senator Hayden, and urged others to send them.

The dought situation here has certainly been serious. Since 1933, there has been paid directly by the Federal Government $139,996.89 to this county for drought relief. We realize that the amount paid directly is a measurable amount but also knoe that this is only a fraction of the amount spent in the county, indirectly for drought relief. We feel the project is the answer for relief to our drought condition. If a favorable amount could be received in this session of Congress, pumps could be installed immediately and much relief could be received by next summer. This would be very encouraging to the farmers, ranchers, and to all businesses in this county.

We were greatly encouraged by the action of the House of Representatives in restoring funds for the reclamation projects. I understand Keith Thomson has met with two members of the House appropriations conference committee and has been assured they will support us when the time comes.

Your efforts toward the completion of receiving an appropriation this session of Congress will be greatly appreciated. If I can furnish any further information, or if you feel I can be of help by contacting other parties, please advise.

Sincerely yours,

WILLARD V. WILSON,
President, Owl Creek Irrigation District.

WASHINGTON PUBLIC UTILITY DISTRICTS ASSOCIATION, SEATTLE, WASH.

STATEMENT OF KEN BILLINGTON, EXECUTIVE SECRETARY

PREPARED STATEMENT

Chairman HAYDEN. Mr. Billington.

Mr. BILLINGTON. Mr. Chairman and distinguished Senators of the committee, I have a prepared statement which I would normally have desired to read, but in deference to the time perhaps it may just be entered into the record.

Chairman HAYDEN. We will be glad to include it in the record and you may highlight it for the committee.

Mr. BILLINGTON. Thank you.

(The statement referred to follows:)

Mr. Chairman and members of the committee, I am Ken Billington, executive secretary of the Washington Public Utility Districts Association, Seattle, Wash., speaking on behalf of the 23 member publicly owned utilities which serve over 21[illegible],000 electric customers in our State. We are greatly alarmed over recent actions by the House of Representatives, cutting appropriations for fiscal year 195[illegible] on Western multipurpose projects and the Bonneville Power Administration.

Cutting appropriations always stirs up wails of anguish or argument from constituents, and possibly our views will be placed in this category. We would assure you, however, that we approach not in the manner of hat in hand on these projects.

Our alarm comes from our evident inability to get across the sound basic fundamentals which we have often repeated to committees of Congress as regards these Government investments in Western water projects. What can we offer the committee and the Members of Congress to reemphasize the following basic points on appropriations for the multipurpose projects in the Columbia Basin area and the needs of the Bonneville Power Administration to make these projects efficiently operated with proper repayment of the loan funds with interest to the United States Treasury?

We make these points:

(1) The Bonneville Power Administration is an operating organization. Therefore the Congress as its board of directors, managing the organization, should make adequate provision for proper operating and maintenance funds. We who pay the wholesale power bills which repay the Government investment with interest, as well as any funds used for operation and maintenance are as interested as anybody in efficient management of Bonneville. We can't reconcile deletion of funds necessary for efficient handling of this operating agency

(2) Once construction of projects which include power is started, it is just good business to get the generators on the line by which reimbursement is to be made. Interest cost during construction, interval construction of component parts by different contractors, inability to properly schedule construction, all add to the cost of a project. We feel it is proper that the Federal Government should continue the policy, started when our great Nation began, of the proper investment of Government dollars in national-resource development. The building of the huge dams on the Columbia and Snake Rivers is a very important and proper thing to do. But the important part is that once a project is started, it is just good business to get it completed as soon as possible. Thus cutbacks on needed appropriations on revenue-producing projects simply cost money, first to the taxpayers in their loan funds to the Northwest projects, and second to the Northwest electric consumers when they pay back the investment with interest.

(3) New starts must be made. At a time when this Nation is in a desperate race with Communist enemies—both as to military strength and economic wealth—it is a poor time to say that further resource development cannot be made. This Nation prospers as a whole and if the economy of the Northwest suffers, the Nation will suffer. The fact that one of the great remaining natural resources of this Nation is enbodied in the water-power resource of a regional river basin should spur on new starts to help the entire national economy and defense effort.

(4) The people of the Northwest are not standing idly by, looking entirely to Congress for their program. We are doing things out there within our power, whether you call it partnership or fair deal. However, no group should be permitted to do something which will destroy the integrity of maximum development under a comprehensive river-basin program. There is a limit to which local groups can meet this need. Thus, there is need for full Federal participation in that river development to answer the needs which cannot be answered by local groups.

With these points in mind may we respectively cite the various needs in this year's appropriations and those items cut by the House of Representatives which would fall, in our opinion, outside of good business and proper Government action.

Cuts in the Bonneville Power Administration operation and maintenance funds must be restored. This would amount to $150,000. These funds are being returned to the Federal Treasury each year by the project earnings. These are not wasted funds.

Additionally, one important item in the Bonneville construction budget which was deleted by the House is for a second transmission line of 115,000-volt capacity from Olympia to Aberdeen, Wash. The same day the House committee made this cut, public announcement was made by the Weyerhauser Timber Co. of plans to build a large pulp mill out near the end of this proposed new line. This will require service from the Grays Harbor Public Utility District which relies for its power supply on the Bonneville system. Without this line, the district cannot meet this load expansion of the private industry. Additionally, an REA cooperative located near the end of where this line will go is seeking power supply which is to be met through these facilities.

We also urgently request authority for Bonneville Power Administration to include in its construction program the study in the upper Olympic Peninsula service area. More specifically, this includes the surveys and design needed dur-

ing the 1956 fiscal year for the 115-kilovolt Shelton-Fairmount line and the Fairmount substation. These facilities should be in service by the fall of 1958 to prevent overloading of the Shelton-Port Angeles line and the Port Angeles substation.

Under point (2) we support the amounts requested by the Corps of Engineers and the Bureau of the Budget, and approved by the House, as bare minimums.

Under point (3), we urge planning funds for John Day Dam and Ice Harbor Dam. John Day Dam is the most logical Federal new start in the Northwest and should be pushed forward in line with our defense and economic needs.

We recognize the difficulty of providing funds for all Government activity, but we urge consideration of the value to this Nation of a continuing resource development program and its resulting expanding economy. We respectfully thank you for this opportunity to testify on our needs and urge favorable consideration.

GENERAL STATEMENT

Mr. BILLINGTON. I am Ken Billington, executive secretary of the Washington Public Utilities Districts Association, representing and speaking on behalf of 23 member publicly-owned utilities which serve over 216,000 customers in the State of Washington.

I may clarify my report as follows for the committee's benefit.

NORTHWEST POWER NEEDS

The question might arise as regards the reason for our appearance directly rather than in the previous Northwest group. I wish to state that although we are unified on the needs of the Northwest for power sometimes we disagree as regards extent and method.

Now, I will also amplify that statement. Merely on the basis of our previous experience, the load estimates submitted in my opinion are too conservative. We would not want to belittle the various area engineers who served on the committee which established the load growth forecast in the Northwest, but we feel they are incorrect from the standpoint of actual experience during the last several years.

Where we have been estimating in terms of perhaps 6 and 7 percent load growth in the Pacific Northwest, our actual experience belies this type of estimating.

For example, last year alone we find ourselves running 10, 12, and 13 percent in load growth, just normal load growth, without any so-called large industrial users.

The reason I emphasize this is that in my statement we specifically request a new start on the part of the Federal Government in the Pacific Northwest.

INTRODUCTION OF NATURAL GAS

A second comment I would make is regards some of the thinking abroad that the introduction of natural gas in our area is going to ease, so to speak, the need for electricity.

As best we can establish by concentrated analysis and study, the coming of natural gas to the Pacific Northwest is going to hasten or increase the need for electricity.

Although it might help perchance in some of the domestic services, there is a strong chance that with natural gas you will have industrial growth which in turn will call for more electrical output.

So again I say that the estimates which we talk about in electrical load growth in our opinion are too conservative.

COMPARISON OF GAS AND ELECTRICITY COSTS

Senator ELLENDER. Has a comparison been made of the cost to the householder of utilizing gas to cook with and heat the place in contrast with electricity?

Mr. BILLINGTON. I have no figures as regards that. I do know that there are studies being made, but there are a lot of factors to be considered before the gas people can actually establish what their sales price is going to be.

But the emphasis I wish to make, and this is all I am going to say on power supply, is that with the introduction of natural gas into our area we feel that we will have greater need of electrical output there because of the additional industry as well as resulting growth in population.

For example, in the forecast which you heard about and on which the previous charts were presented, I think the engineers used about 6⅞ percent growth, compounded annually.

We have areas among the public utility districts that are running 13, 15, and 17 percent load growth per year.

ICE HARBOR DAM

Now, with that in mind, in my statement which I have submitted for the record, you will note a request for a new start. We are asking specifically that a sum of $2,500,000 be included for the Ice Harbor Dam on the basis that it is the one dam that has been engineered and is completely ready for construction by the Corps of Army Engineers. We have not had a new start in approximately 4 years on the part of the Federal Government.

So we urge the consideration of the Senate committee to include such funds.

FISH CONTROVERSY

Chairman HAYDEN. Has the fish controversy been resolved?

Mr. BILLINGTON. I doubt if we could resolve the fish controversy to the exact liking of both the fish people and power people, but at the same time the power people feel that past experience has demonstrated for dams of the height of Ice Harbor as for example Bonneville around the same level, we have demonstrated that properly installed fish facilities will take care of that situation.

BONNEVILLE POWER ADMINISTRATION BUDGET

My primary interest here is on the Bonneville Power Administration budget.

The operation and maintenance funds were cut in the House from the budget request of $6,650,000, to $6,500,000. Perhaps $150,000 would appear small although we all realize that every dollar is important, but when we translate that into terms of the needed 15 substation operators or 3 additional climbing linemen to go out and bolster inspection of this large Federal system out there, when you transfer the $150,000 into actual operation and maintenance then you can realize why we who are on the end of the Bonneville line urge full consideration of the budget request.

I have brought some pictures with me of the actual lines which might be of assistance in demonstrating what we mean by operation and maintenance.

There you will see pictures of the rugged country through which the Bonneville lines travel. You will see a large amount of undergrowth which occurs very rapidly, at least in the western section of Oregon and Washington.

So when we say "operation and maintenance," we very definitely mean just that.

I would like to speak specifically on the two items that were deleted in the House. The Aberdeen-Olympic line No. 209, and the Olympic-Peninsula service item No. 204.

I might say that many times construction items in an operating system will come not only from service needs at the particular moment, but also from the standpoint of system operating needs. For example, on the Olympic service item, although we are certain because we have given close scrutiny to all the Bonneville items this year, the loads will be there by the time the facility gets in, there is the additional matter of transferring the power.

I have a map here by which it can be demonstrated that power is taken past a needed point and then brought back, resulting in line losses to the Federal Government, as well as line losses to the Clallam County PUD. In turn by this new item 204 we would alleviate that situation.

Secondly, on the Aberdeen-Olympia line the request was for $100,000 as beginning construction funds for a second line to the Gray's Harbor area in our State.

The same day that the House committee reported out that this item had been taken out of the budget, announcement was made of the building of a large pulp mill down at the end of the line, so to speak, which will be calling on the Gray's Harbor Public Utility District for electric service. It intensifies the need for that facility and definitely assures from the standpoint of load being there to make use of the line.

Coupled with the need of serving the load in this area there is also the need for system operations, which dictated this particular item.

It might be of interest—this has no connection with power—but that particular pulp mill is to use low grade, nonsalable timber which is controlled by the United States Forest Service, Department of Agriculture.

Last year I believe there was about $1,800,000 income to the Federal Government in the sale of this sustained yield to the industries in that area.

The building of this type pulp mill there is going to frankly give more income to the Forest Service on the sustained-yield sales because of the use of smaller nonsalable timber.

Chairman HAYDEN. That is regrowth that comes up so thick that it has to be thinned or is this just remnants, tops, and things like that?

Mr. BILLINGTON. It will be both, sir. In other words, you have a very definite sustained forest program there, and it would be both. I imagine it would be the secondary or top type of material that is not salable at the present time, but which would be put to good use by the construction of the pulp mill. I believe that will conclude my statement.

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Chairman HAYDEN. In other words, you are saying that the Government has two avenues of getting its money back. One is that if the line is built and they pay the rates in due time they will get the money back. The other way, if it is built, they will sell more timber and get the money back.

Mr. BILLINGTON. I merely want to point out that the industry down there is going to be beneficial both ways.

Chairman HAYDEN. Thank you for your statement.

Mr. BILLINGTON. Thank you, Mr. Chairman.

Chairman HAYDEN. Mr. Radin.

AMERICAN PUBLIC POWER ASSOCIATION

STATEMENT OF ALEX RADIN, GENERAL MANAGER

PREPARED STATEMENT

Mr. RADIN. Mr. Chairman and Senator Ellender, ny name is Alex Radin. I am general manager of the American Public Power Association, which is a national trade organization which represents some 800 local publicly owned electricity utilities. I have a statement which I would like to have placed in the record.

Chairman HAYDEN. That may be done.

(The statement referred to follows:)

STATEMENT BY ALEX RADIN, GENERAL MANAGER, AMERICAN PUBLIC POWER ASSOCIATION, RE APPROPRIATIONS FOR BONNEVILLE POWER ADMINISTRATION AND CORPS OF ENGINEERS PROJECTS

My name is Alex Radin. I am general manager of the American Public Power Association, a national trade organization which represents more than 800 local publicly owned electric utilities in 40 States and Puerto Rico. Most of the member systems of our association are municipally owned electric utilities, but our membership also includes public utility districts, State-owned electric systems and rural electric cooperatives. No Federal power system is a member of the association.

In behalf of our association, I wish to endorse the appropriation requests made before your committee today by Mr. Ken Billington, executive secretary of the Washington Public Utility Districts Association, which is an affiliate of the American Public Power Association.

We are particularly concerned by the fact that, in an area which has the largest potential hydroelectric power capacity of any in the United States, there have been no new starts for the past 4 years. This is particularly tragic in view of the tremendous increase in demands for power in that area, and the fact that a power shortage is impending in 1961 unless a new start is authorized immediately.

In this connection, we should like to emphasize the following statement from the 1954 Advance Program of the Bonneville Power Administration (see p. 2), which was released September 3, 1954:

"Studies by the Bonneville Power Administration, in cooperation with non-Federal utilities, indicate that, despite the large construction program underway, the west group utilities in the Northwest power pool will be unable to meet all their firm loads under minimum water conditions by the year 1961–62, even with the use of relatively high-cost steam." (The west group covers all of Washington, most of Oregon, and northern Idaho.)

The report adds that the west group will have increasing deficits in prime capabilities, increasing from 200,000 kilowatts in 1961–62 to 800,000 kilowatts in 1963–64. This does not include provision for new electroprocess industries which could be attracted to the Pacific Northwest if low-cost power were made available. Such potential loads are estimated by Bonneville to be in the neighborhood of 3 million kilowatts.

The local publicly owned electric utilities in the Pacific Northwest which are members of our association are not standing idly by in the face of this situation. The city of Tacoma, for example, is pressing forward with its Cowlitz River project; the Grant County Public Utility District is seeking a Federal Power

Commission license to build the Priest Rapids project; the city of Seattle is not only continuing with the development of its projects on the Skagit River, but is also working closely, through the Puget Sound Utilities Council, with three other publicly owned utilities and a private company in planning additional projects. Other local public agencies also are considering the construction of projects.

This program of power development by the local public agencies in the Pacific Northwest is not an innovation; the cities of Seattle and Tacoma, for example, have long been pioneers in development of the waterpower resources of that area, and for many years they have been among the leaders in the Nation in providing their consumers an abundance of power at low rates.

However, despite this continued local public development, there is still an urgent need for concurrent Federal development to keep pace with requirements of the area and to provide an integrated, comprehensive resource development program. This is emphasized by the Bonneville Power Administration in its 1954 report referred to above, which states, "So great is the task that active participation of all public and private groups interested in power development is essential."

The report notes that non-Federal utilities have 33 hydroelectric projects, and additions to existing projects, with a total capacity of over 5 million kilowatts, under consideration in Washington, Oregon, Idaho, and western Montana, but adds, significantly, "How many of these will actually be built, and how soon, cannot be predicted at this time."

"The Federal Government," the report states, "will continue to undertake large multipurpose projects which are beyond the means of local public or private enterprise."

Because of this urgent need for continued Federal development (only 13 percent of the hydroelectric power potential of the Columbia River and its tributaries has been harnessed to date), we urge your committee to appropriate funds for initiation of construction of the Ice Harbor project. This is the only project which the Corps of Engineers has ready for immediate construction. It would have an initial capacity of 139,000 kilowatts which could be increased to 240,000 kilowatts as downstream storage capacity became available.

In order for the power program of the Pacific Northwest to keep pace with needs of the future, planning must also go forward promptly on new projects. In this connection, we support the appropriation for planning funds for the John Day project, and submit herewith our Resolution No. 13 which was adopted May 5, 1955, at our association's annual convention in Jacksonville, Fla.

In connection with appropriations for Bonneville Power Administration, we urge restoration of the $150,000 in operations and maintenance funds which were cut from the President's budget by the House. Our member utilities in the Pacific Northwest are customers of the Bonneville Power Administration, and as such, we believe that they and all other Bonneville customers are entitled to adequate service. It is our understanding that the $150,000 cut in operations and maintenance funds would seriously impair the level of service provided by Bonneville to its wholesale customers.

We also wish to endorse the restoration, in the Bonneville program, of the 115-kilovolt line between Olympia and Aberdeen and the study in the upper Olympic Peninsula service area. With regard to the Olympia-Aberdeen line, we particularly wish to call to your attention the fact that, subsequent to the House Appropriations Committee action on this line, official public announcement was made by Weyerhauser Timber Co. of plans to build a large pulp mill near the end of this proposed line, requiring service from the Grays Harbor Public Utility District, which is a Bonneville customer.

In view of the self-liquidating nature of the projects listed above, and the fact that they are of benefit not only to the area but to the entire Nation, we urge your approval of funds for such projects.

RESOLUTION ADOPTED MAY 5, 1955, AT AMERICAN PUBLIC POWER ASSOCIATION ANNUAL CONVENTION, JACKSONVILLE, FLA.

RESOLUTION NO. 13—JOHN DAY DAM

Whereas the Pacific Northwest faces a serious power shortage starting in 1960 because no new Federal dam has been started in 4 years; and

Whereas the million-kilowatt John Day Dam and navigation locks has been authorized by Congress and is ready for final planning and design, requiring $2 million during this year so as to be ready for construction next year: Now, therefore, be it

Resolved, That the American Public Power Association endorses immediate Federal construction of John Day Dam.

SUPPORT FOR BONNEVILLE FUNDS

Mr. RADIN. We would like to go on record in support of the other public agencies in the Pacific Northwest for the restoration of the funds for operation and maintenance of the Bonneville Power Administration. Our members out there who include the public utility districts represented by Mr. Billington and other local public agencies are customers of Bonneville Power Administration and we believe are entitled to adequate level of service. We feel that this cut of $150,000 would impair the type of service maintained and extended to the public agencies, as well as the private power companies who are customers of Bonneville.

We also support the inclusion of the Olympia-Aberdeen line and the upper Olympia Peninsula service. We also wish to urge your approval of the planning funds for the John Day project which we think is urgently needed and would also like to urge your support for a new start in the Pacific Northwest, namely, the Ice Harbor project, which is the only one where all the engineering has been completed, and is authorized and is ready to go. That, in brief, is our position.

SUPPORT FOR APPROPRIATION REQUESTS

Chairman HAYDEN. I would like to have included in the record at this point a statement by the Puget Sound Utilities Council, in which they request that the budgets of the Bonneville Power Administration and the Corps of Engineers be approved.

(The statement referred to follows:)

STATEMENT OF JACK D. STEVENS, CONSULTING ENGINEER

The Puget Sound Utilities Council consists of Seattle City Light, Tacoma City Light, Puget Sound Power & Light Co., Snohomish County Public Utility District No. 1 and Chelan County Public Utility District No. 1. They own and operate powerplants that have a combined peaking capability of 1.6 million kilowatts. In addition, they all have long-term firm-power contracts for the purchase of power from the Federal Columbia River power system. The council utilities serve a population of 1,530,000 persons, 60 percent of the State of Washington. Annual income is about $64 million and total assets are over one-half billion dollars. The utilities are now investigating 8 hydroelectric projects totaling 2.8 million kilowatts.

The five public and private electric power utilities comprising the Puget Sound Utilities Council have examined the fiscal year 1956 budgets of the United States Army, Corps of Engineers, and the Bonneville Power Administration, Department of the Interior. The utilities believe that all of the budget items are necessary, and that the budgets of the respective agencies represent minimum requirements. The council urges, therefore, that no reductions be made in the budgets presented by these two agencies.

The power program of the Puget Sound Utilities Council is closely coordinated with the resources and power operations of all Northwest utilities and agencies directly, or indirectly, associated with the operations of the Northwest power pool. The budgetary items proposed by the Corps of Engineers and the Bonneville Power Administration are consistent with the development of regional resources and power operations.

The Puget Sound Utilities Council respectfully requests approval by the Subcommittee of Public Works of the Appropriations Committee, of the fiscal year 1956 budgets of the Corps of Engineers and the Bonneville Power Administration.

STATEMENT OF SENATOR MORSE

Chairman HAYDEN. Senator Morse of Oregon presented a statement to the full Subcommittee on Public Works dealing with projects under

the jurisdiction of both the Corps of Engineers and the Bureau of Reclamation. That portion of the Senator's statement pertaining to the Bureau of Reclamation will be included in the record at this time.

(The statement referred to follows:)

STATEMENT OF HON. WAYNE MORSE, UNITED STATES SENATOR FROM THE STATE OF OREGON

TALENT DIVISION, ROGUE RIVER PROJECT, OREGON, CONSTRUCTION

In August 1954 this project was authorized for construction. It involves an extension and rehabilitation of the works of the Talent Irrigation District for irrigation, flood control, and electric power. The total project cost is estimated at $20,560,855.

The basic feasibility planning on the project is complete, and the detailed planning is scheduled for completion in June 1955. Construction on several segments of the project can be undertaken during the fiscal year 1956, upon the signing of a repayment contract by the Talent division water users.

The project feasibility report, including the preliminary land classification, has been completed.

Over the years the irrigation and power features will involve no cost to the Federal Government. The power investment will be repaid, with interest, in 49 years. Thereafter, power, as well as irrigation revenues, will be applied against the cost of irrigation. A complete payment will be realized in about 60 years.

Construction can be initiated with an appropriation of $2,500,000, and the work can be completed in approximately 6 years. To illustrate, during the fiscal year 1956, construction can begin on the Howard Prairie Dam and Reservoir, the South Fork collection canal, the Big Draw collection canal, the Howard Prairie delivery canal, the Ashland lateral, east lateral, and the Green Springs powerplant.

Unfortunately, the President made no request for construction funds for the Talent project.

The area in which the Talent project is located depends primarily upon agriculture and the logging and lumber industries to sustain its economy. The present supply of irrigation water is now inadequate, making it impossible to realize the valuable harvests and full crop potential which additional water would supply. Construction of the Talent project would relieve this situation and in addition would add 8,640 acres of irrigated land. The storage facilities of the project would afford a much needed and constant supply of water.

A powerplant of 16,000 kilowatts capacity on the project will contribute substantially toward relieving the power shortage of the area and will provide stimulus to new and expanding industry. To make certain that the powerplant installation will be on hand by the time the power drop at the Green Springs location becomes available, it is essential that the contract for powerplant equipment be awarded during the fiscal year 1956.

I strongly urge initiation of construction on this extremely worthwhile project which has the support of local farm and business groups.

AMAZON CREEK, OREG., PLANNING FUNDS

The Amazon Creek project was modified in 1954 so as to increase the total estimated cost from $617,000 to $894,000. Originally, a tentative allocation of $15,000 in planning funds was indicated by the Army engineers for the fiscal year 1956. I am informed that this tentative allocation has been increased to $22,000 during recent weeks. As a resident of Lane County, I am familiar with the importance of this project and strongly urge that the item of planning funds be in a sufficient amount to enable the actual allocation of $22,000 in planning funds for this important flood-control project.

DESCHUTES PROJECT, HAYSTACK RESERVOIR (NORTH UNIT IRRIGATION DISTRICT)

Benefits: The Haystack Reservoir will serve as equalizing unit for the Wickiup Reservoir of the Deschutes project. It will provide a backlog of water to meet extraordinary demands of the irrigation district and during periods of decreased demand can be used for storage of surplus water. It will assure a reasonable uniform rate of release from Wickiup Reservoir, and it will provide additional

water and consequent substantial agriculture of this semiarid region. Of the $274,000 I urge be appropriated, $24,000 would be used for the Wickiup Reservoir.

MEDFORD, ROGUE RIVER VALLEY IRRIGATION DISTRICT REHABILITATION PROJECT

The rehabilitation program in this case includes new and reconstructed spillways at the dams and replacement and repair of water conveyance structures. Repayment of rehabilitation costs is estimated to cover a 40-year interest-free period.

The project when completed will supply additional water to the highly important agricultural area of Medford, and will be especially beneficial to the fruit growers of that vicinity.

OWYHEE REHABILITATION PROJECT

The rehabilitation program includes installation of four new pumps for Gem Irrigation District pumping plant in Idaho and the purchase of new pumps and start of rehabilitation of the Ontario-Nyssa pump plant. These 2 plants, serving approximately 26,000 acres of land, have been in service over 40 years. Prompt replacement is necessary in order to insure uninterrupted water deliveries. These funds would make possible wasteway outlets. This work is of great importance to a growing agricultural area.

ARNOLD REHABILITATION PROJECT

The rehabilitation program provides for replacing of six deteriorated wood flumes. These old flumes waste considerable water and maintenance costs would be too heavy because of their age. The economy of the community would be seriously affected if irrigation were discontinued.

These irrigation projects in Oregon are required for the normal growth of important agricultural areas in the State of Oregon. They have been authorized and undertaken after years of painstaking study, and are strongly supported in the local communities. There is a market for the products that would be grown or whose continued production would be insured.

E. Bureau of Reclamation Construction

Construction project	Project cost	Benefits	Status	Amount in President's budget	Amount usable, fiscal 1956	Amount recommended by Senators Morse, Neuberger, and Representative Green	Additional recommended by Senators Morse, Neuberger, and Representative Green
Talent irrigation	$20,560,855	Irrigation, flood control, and power.	Authorized	None	$2,500,000	$2,500,000	$2,500,000
Deschutes project (Haystack and Wickiup Reservoir, North Unit Irrigation District).	1,600,000	Irrigation	Authorized; to be added to project constructed.	$274,000	274,000	274,000	
Rogue River Valley Irrigation District rehabilitation.	1,673,065	do	Constructed	350,000	350,000	350,000	
Owyhee rehabilitation project	571,000	do	do	202,000	202,000	202,000	
Arnold rehabilitation project	90,000	do	do	90,000	90,000	90,000	
Subtotal				916,000	3,416,000	3,416,000	

STATEMENT OF SENATOR MANSFIELD

Chairman HAYDEN. Senator Mansfield presented a statement to the full Subcommittee on Public Works. That portion of his statement concerning the Bureau of Reclamation will be included in the record at this time.

(The statement referred to follows:)

STATEMENT OF HON. MIKE MANSFIELD, A UNITED STATES SENATOR FROM THE STATE OF MONTANA

BUREAU OF RECLAMATION PROJECTS

I would like to discuss funds for various Bureau of Reclamation projects in Montana. First, I wish to voice my approval of the request for $90,000 for planning of the multipurpose Clark Canyon Dam on the Beaverhead River near Dillon, Mont. Clark Canyon would be the main feature of the so-called East Bench unit, which, as authorized, would include also a diversion dam and a system of canals, laterals and drains.

The completion of this project would prevent a recurrence of damaging floods in the Dillon Valley, provide a much-needed municipal water supply for the city of Dillon and bring full irrigation service to some 23,000 acres of land and supplemental water to almost 25,000 acres more. The project would also produce power. It is estimated that the total cost of the Clark Canyon Dam will be $21¼ million.

The people of this locality need controlled water storage badly. There is ample water in the area, but it must be controlled so that it can be delivered where and when it is needed.

Next, I ask that the $3 million request for the Helena Valley unit be granted. The first appropriation for this unit was granted under a supplemental appropriation last year. The completion of the irrigation features would bring a full water supply of 13,000 acres, supplemental water to 4,600 more, in the fertile Helena Valley.

This project will contribute greatly to the stability of agriculture in the Helena Valley. The completion of this unit will also help to stabilize the surrounding livestock-range country which is dependent upon it to a great extent for winter feed and to the stability and well-being of the city of Helena, which derives considerable portion of its business from the surrounding ranching and agricultural enterprises.

There are several irrigation projects under the Bureau of Reclamation funds which I wish to express my support of. I hope that the final form of this public works appropriation bill will provide funds for carrying on existing contracts on Tiber Dam and funds to complete plans for power and irrigation features of the lower Marias unit.

Funds are needed for drainage and minor construction, including additional drainage facilities on the first and second divisions of the Buffalo Rapids project in eastern Montana. Funds are also needed for the Greenfield division of the Sun River project, and drainage ditches are required on the Crow Creek unit before these lands can be placed under irrigation.

There are two larger Bureau of Reclamation projects in Montana which are to receive little or no funds under the budget request for fiscal year 1956. I refer to Moorhead and Yellowtail Dams.

I notice that the budget request for Moorhead is only $1,000 for maintenance of buildings at the dam site. It is unfortunate that sufficient funds are not being requested to make some material progress on this multipurpose project. The Moorhead unit would provide storage on the Powder River at the Moorhead site, located in Montana near the Wyoming State boundary, for irrigation of some 58,000 acres along the lower Powder River and for flood control, silt retention, and power.

I sincerely hope that any difficulties that may exist can be worked out favorably so that work can be started on this project which is needed by the farmers and ranchers of this area.

YELLOWTAIL DAM

Yellowtail Dam is a project that is long overdue and it is unfortunate indeed that there are no funds in the fiscal year 1956 budget request. The Yellowtail and Hardin units of the Missouri River Basin project were authorized by the

Flood Control Act of 1944. Yellowtail Dam is a multipurpose development planned to provide for irrigation, flood control, power generation, silt retention, improvement of fish and wildlife resources, recreational opportunities, municipal and industrial water, and other benefits.

The local inhabitants have shown great concern over this project because they feel that it is necessary for the economic welfare of southeastern Montana. Drought in this area during the past 2 years has caused many hardships and failures in business and farming.

Yellowtail has been authorized as a Federal multipurpose project and should be constructed as such. A year ago the House Interior Committee on Interior and Insular Affairs recommended that the Yellowtail-Hardin units be "immediately programed for construction." The appropriate agencies complied with this view at that time.

The principal obstacle in recent years to construction of these projects at Hardin has been the inability to negotiate with the Crow Indians, a portion of whose land would be submerged by the reservoir. However, I am informed that a satisfactory settlement is possible in this respect.

However, all obstacles to actual construction being so nearly removed, the Bureau of the Budget has insisted that the partnership plan be considered. I am not here to discuss the partnership plan, but if this new administration plan were accepted for Yellowtail, it would involve a delay of 4 to 5 years, deauthorization, reauthorization, renegotiation and many other obstacles. This project should not be delayed any longer in the interests of all people concerned.

I recommend to this committee that an appropriation of $5 million be granted to begin construction on Yellowtail Dam, an integral part of the Missouri River Basin project. If partnership interests persist, that can be settled at a later date when the powerplant is scheduled for construction. Regardless of the final arrangement, the Federal Government will have to provide the entire cost of the dam and reservoir, it is the powerplant that the partner wants in this new proposal.

If these funds are provided to acquire rights-of-way and begin construction, there would be no time lost if the partnership negotiations should fail and the Federal Government were to go ahead with the power installation.

Mr. Chairman, in conclusion I wish to say that it is disheartening to see that in recent years there has been no new starts made in the many areas where power is very limited. We have come a long way in our resource programs; we have a long way to go before the still untapped energy of the rivers of America are put to work for democracy. We cannot afford to slow up now, such a plan and program must be carried into effect by the Congress with ample and speedy appropriations.

STATEMENT OF SENATOR BENNETT

Chairman HAYDEN. Senator Bennett appeared before the full Subcommittee on Public Works and presented a statement. That portion of his statement dealing with the Bureau of Reclamation will be included in the record at this point.

(The proceedings referred to follow:)

STATEMENT OF HON. WALLACE BENNETT, A UNITED STATES SENATOR FROM THE STATE OF UTAH

WEBER BASIN PROJECT

The first of the three, which is the second in the statement, is the Weber Basin project. This project has already been begun, and the President has recommended $10,895,000 for construction this year. We hope the Senate will approve this because if the full amount of money is available, the project can be completed to the point that the Wanship Dam can catch the spring runoff next year and gain a full year in the use of the water.

There are two other projects, and the first is the Deer Creek powerplant. When the Deer Creek dam and project was completed in 1941, the question as to how the power facilities were to be developed was left open, and now, after 14 years, it has finally been decided that the Bureau of Reclamation should install the power facilities.

For a while it looked as though the water users' association would be able to make a private contract, and they would have built the facilities without Federal money. But that has now proved to be impossible, and on April 22 of this year Secretary McKay approved the building of the powerplant by the Government.

There is a peculiar situation in this particular project. The Provo River and the Weber River rise almost together in the high Uintah Mountains, and the water of the Weber River is dedicated and therefore partly controlled by the Utah Power & Light Co., which is entitled to so much water in order to maintain its power production facilities.

The Provo River Water Users Association, which operates the Deer Creek Dam, is entitled to half the spring runoff of the Weber River. When we have a bad year, as we have the past 2 years, and there is no unusual spring runoff, the water users, in order to get water enough to supply the farmers whom they serve, have to buy water that otherwise belongs to the Utah Power & Light Co. and have it diverted from the one river system over into the other.

Now, it was intended that when that situation existed, the water users would be able to pay for that water by power that they developed on their own dam. Otherwise they would have to pay for it in cash, and the burden last year was $50,000 on the farmers who live under the Deer Creek Dam.

So the sooner we can get the powerplant built the sooner it will be able to pay in years of drought with power instead of with water users' money. They are already heavily burdened in paying for the original project.

The request is for $200,000. I hope that will be seriously considered. It is estimated that the power plant will pay out its cost in 17 years, as well as contribute substantially to the final payout of the whole project.

I will include in the record detailed statements on these projects.

(The statements referred to follow:)

DEER CREEK POWERPLANT

The first project is a proposed new 5,000-kilowatt capacity hydroelectric plant at the Deer Creek Dam on the Provo River reclamation project. The construction of the Provo River project was completed in 1941 and the Deer Creek Dam includes the necessary penstocks and powerhouse foundation for a powerplant. However, the additional hydroelectric facilities were not constructed pending an agreement between the Federal Government and the Provo River Water Users Association, the local contracting organization.

The local association has explored alternative construction possibilities with private capital but they have found it to be impractical. They have now reached an agreement with the Department of the Interior which was approved by Secretary McKay on April 22 of this year.

The powerplant, as approved by the Department of the Interior, was similarly approved by the Bureau of the Budget, the Federal Power Commission, and the Corps of Engineers in 1951 and 1952, as shown in House Document No. 37 of the 83d Congress, 1st session.

It is vitally important that the powerplant be constructed as soon as possible. There is a serious water shortage in the area serviced by the Deer Creek project and the water supply of the Deer Creek diversion of the project is dependent in substantial measure upon a powerplant at the Deer Creek Dam. Most of the available water to the project comes from the Weber River and it is only the early spring runoff or floodwater which is available. However, the water year of 1953–54 produced no floodwater on the Weber River in excess of prior rights. It is only through a contract with the Utah Power & Light Co. that additional water from the Weber can be obtained.

Under the contract made in 1938, one-half of the "winter power water" above Echo Reservoir on the Weber River may be diverted to the Deer Creek Reservoir. But, the water must be paid for. The loss to the power company, due to taking the water away from its Weber River powerplants, must be made good by delivery to the power company of equivalent energy from a new powerplant at the Deer Creek Dam, or by delivery of water into the Provo River for use of a powerplant operated by the power company on that stream. Since there is no powerplant at Deer Creek, and since there is a recurring and serious water shortage, the only way the water can be obtained is for the water users to pay cash for the power water. They have paid $50,000 during this year alone and they are already heavily burdened in paying for the reclamation project itself. I am advised by the water users that they cannot continue to pay for the powerplant in view of their already extensive obligations.

The powerplant was planned in the original development, completed in 1941, to pay for the winter power water and to aid in paying for the project once the power phases were paid for.

The 13 years' delay has been costly to the water users and they are in a critical condition as a result of the present water shortages. I, therefore, urge this com-

mittee to appropriate the necessary $200,000 to begin construction of the powerplant this year.

The powerplant will pay out its estimated cost of $1,051,000 with interest in about 17 years, as well as pay for the Weber power water. It may also contribute as much as $4 million toward retirement of irrigation costs of the project.

WEBER BASIN PROJECT

I wish, also, to strongly urge that this committee approve the full $10,895,000 requested by the President for the Weber Basin project in fiscal year 1956.

The work on the project has proceeded with sufficient rapidity so that water can begin to be stored at the Wanship Dam by the spring of 1956, thus catching the spring runoff. Under the present schedule, water could be delivered in the summer of 1957 to Weber and Davis Counties, which are now suffering from a serious water shortage. However, this progress is contingent upon receiving the full appropriation.

Weber and Davis Counties have received a great portion of the nearly 30 percent of growth in the State of Utah since 1940. The population of the two counties has expanded so rapidly that they have outgrown both their irrigation and their municipal water supply. Fortunately, the Weber Basin project will provide some municipal water in addition to that furnished for irrigation.

The features of the project which will provide initial delivery of water are now underway. It is urgent that they be completed as rapidly as possible to provide water for several of our towns and cities now experiencing critical water shortages.

STATEMENT OF SENATOR LYNDON JOHNSON

Chairman HAYDEN. Senator Lyndon Johnson has presented a statement concerning general investigations by the Bureau of Reclamation. The Senator's statement will be included in the record.

(The statement referred to follows:)

Mr. Chairman, the President's budget for the 1956 fiscal year contains an item of $578,000 for continuing an investigation of the Gulf Basin project.

This study is of the greatest significance to my State. It may be said without exaggeration that the investigation involves a matter of economic life or death for important agricultural and industrial areas of Texas.

The Gulf Basin project includes that portion of southeast Texas lying within the drainage basins of the Sabine, Neches, San Jacinto, Trinity, Brazos, Colorado, Guadalupe, and Nueces Rivers.

This large area is characterized by an extremely poor distribution of its water resources. In many sections, despite the full appropriation of available water supplies, crop failures due to drought are unfortunately frequent. Yet these same sections contain many thousands of acres of inherently fertile land highly suited to irrigated agriculture.

While the area suffers from lack of water, a tremendous amount of water from the coastal streams is flowing unused into the Gulf of Mexico.

This combination of circumstances led me to request back in 1949 that the Bureau of Reclamation make a study on a broad scale of the Texas water problem. The Bureau set forth the results of its study in a report entitled "Water Supply and the Texas Economy, an Appraisal of the Texas Water Problem." The report later was reproduced as Senate Document No. 57, 83d Congress, 1st session.

The study was general and preliminary in nature. Even so, the Bureau estimated that sufficiently far-reaching conservation measures would provide an adequate supply of water to bring approximately 1 million acres of new land under irrigated cultivation. At the same time the rapidly growing demands for municipal and industrial water could be met.

This goal can be achieved only through development proceeding in accordance with an overall project plan. The Bureau undertook a comprehensive study of the entire area to establish the framework for this master plan.

It is this study which would be continued with the $578,000 requested in the budget for the Gulf Basin project.

Mr. Chairman, we can never solve the Texas water problem until we know the facts. We need to determine the yield of Texas streams entering the Gulf of Mexico. We must gain a complete picture of present use and anticipated

future demands for irrigation in the upper basin area in order that we may determine the amounts of water available for intrabasin diversions in the coastal area.

It is necessary that we find out the present use and anticipated future demands for industrial and municipal water as well as irrigation requirements.

We must have the facts. The study proposed by the Bureau of Reclamation will produce the facts.

For the first time in dealing with the Texas water problem, an opportunity is open for the development of a broad-scale attack on that problem—a plan of attack into which both Federal and local investments could be productively and economically channeled.

Mr. Chairman, failure to take advantage of that opportunity would in my judgment, be a tragic error.

The report of the House Appropriations Committee instructed the Bureau of Reclamation not to obligate general investigation funds during 1956 for this project. The House has acted, however, to restore the funds. It is my earnest hope that your committee also will approve funds for this purpose and countermand the instructions in the House Appropriations Committee's report.

Chairman HAYDEN. Thank you. The committee will stand in recess until 10 o'clock tomorrow morning.

(Thereupon, at 4 p. m., Monday, June 20, 1955, the subcommittee was recessed, to reconvene at 10 a. m., Tuesday, June 21, 1955.)

PUBLIC WORKS APPROPRIATIONS, 1956

TUESDAY, JUNE 21, 1955

UNITED STATES SENATE,
BUREAU OF RECLAMATION AND INTERIOR
POWER MARKETING AGENCIES, SUBCOMMITTEE
OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to recess, in room F-39, the Capitol, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden, Senators Young, Thye, and Dworshak.

DEPARTMENT OF THE INTERIOR

BUREAU OF RECLAMATION

STATEMENT OF HON. JOHN F. BALDWIN, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

SOLANO PROJECT, CALIFORNIA

Chairman HAYDEN. The committee will be in order.

We will be pleased to hear from you, Mr. Congressman.

Representative BALDWIN. For the record, Mr. Chairman, my name is John F. Baldwin, Representative from the Sixth Congressional District in California. I am here to testify on the Solano project, California.

The budget submitted by the President to the Congress this year provides $13 million for that project, and I am here simply to state that I hope very much the committee will authorize us the full $13 million for the construction of the project.

The foundation will be laid for the main dam in July of this year. The dam is scheduled to be completed by October of 1956 and it is most important from a timing standpoint that along with the work on the dam proper construction be begun on the diversion dam down the channel and also on the main canal which is designed to take water through Solano County to the agricultural areas and the cities that will be users of the water when the dam is completed.

Chairman HAYDEN. Ordinarily they close the gap of the dam at the low water season and when is that?

Representative BALDWIN. The low water zone is in the late summer, along about August and September. The point I was making is that it is my understanding approximately $11 million of the $13 million is for the completion of the dam proper and that the remaining $2 million is for the beginning of construction on the diversion dam and on the main canal.

The coordination of these three construction phases of the project is most essential because if the diversion dam and the main canal get started this year, then we will get water to the users probably a full year earlier than would otherwise be the case, which means we will actually save money inasmuch as the reclamation project supervisory personnel will be supervising all three phases going simultaneously, whereas if the construction on the diversion dam and the main canal were deferred or postponed we would have those personnel there a longer time, which would mean there would be a larger overhead for those personnel. We would have a delay of getting water to the users, and our reimbursement program—this is a 98 percent reimbursable project—would also be delayed, so that actually it is going to be economy to appropriate the full sum this year to keep these three phases of the project on schedule and get the job done, and the water to the users, and the reimbursement started to the Federal Government.

Chairman HAYDEN. How did this matter come over from the House?

Representative BALDWIN. The full $13 million came over from the House, Mr. Chairman. I hope very much that the committee will give favorable consideration to the full $13 million.

Chairman HAYDEN. Thank you.

Representative BALDWIN. Thank you for the opportunity to appear before you, Mr. Chairman.

STATEMENT OF HON. MRS. JOSEPH R. FARRINGTON, A DELEGATE IN CONGRESS FROM THE TERRITORY OF HAWAII

INVESTIGATION PROGRAM

Chairman HAYDEN. There is a lady from Hawaii who I believe wants to say something.

Delegate FARRINGTON. Mr. Chairman, thank you for the opportunity of appearing here this morning. I am here in regard to the investigation program of the Bureau of Reclamation as it applies to the Territory of Hawaii for the fiscal year of 1956.

The Department of the Interior has requested a total appropriation of $5,175,000 for the general investigation activity, and included in this request if $50,000 for the Hawaikan investigation program to permit the Bureau of Reclamation to furnish technical assistance in the planning of the Molokai and Waimea projects on the islands and to review resports thereon.

This planning program is in accordance with Public Law 634 passed by the last session of Congress which authorized the Secretary of the Interior—

> to make an investigation relating to the conservation, development, and utilization of the irrigation and reclamation resources of the Waimanolo, Oahu; Waimea, Island of Hawaii; and Molokai projects, Territory of Hawaii * * *.

The construction of the Waimanalo project is now complete except for possibly come rehabilitation work which the agencies of the Territorial government are capable of undertaking without assistance, so the activities of the Bureau in fiscal year 1956 will be confined to the Waimea and Molokai projects.

NEED FOR IRRIGATION DEVELOPMENT

There is no doubt that there is a great need for additional irrigation development in the Territory of Hawaii. The islands present a great contrast in rainfall and available water supplies. As a result of the combination of the prevailing northeast trade winds and topographic features, some locales have unusually heavy precipitation while others, often only a few miles away, have such scanty supplies as to be classified as semiarid. Heavy rains usually occur at the higher altitudes in the mountainous regions while the fertile valleys in the interior and the coastal lands on the south and west are inadequately watered.

As an example, in the mountains behind the city of Honolulu there is an annual rainfall up to 160 inches while at the seashore, 5.5 miles from this area of heavy precipitation, the annual rainfall is only 15 inches. The inadequate rainfall in most of the agricultural areas of the Territory requires the lands to be irrigated in order to support successful crops.

AGRICULTURE PRIMARY INDUSTRY

Agriculture is the primary industry in the islands and irrigation is practiced rather extensively. The Territory does not produce sufficient foodstuffs and other necessary agricultural products to meet its own requirements, however, and importation of food is, therefore, a necessity. This situation is attributable to population increase and limited additional farming opportunities which have resulted in a demand for new lands to be tilled.

This condition could be alleviated by the proper development of existing land and water resources. There is a large quantity of arable, water-deficient land available which, if adequately watered, would assist in meeting these land demands.

Chairman HAYDEN. As to the method of doing that with the rainfall striking the mountains on one side and heavy precipitation, originally I believe there were some canals carried through passes, were they not, to bring the water around?

Delegate FARRINGTON. There has been some irrigation; yes.

IRRIGATION BY TUNNELING

Chairman HAYDEN. Somebody told me that they have a new idea now of tunneling through. Is that true?

Delegate FARRINGTON. It is going down and then getting the water at a horizontal level.

Chairman HAYDEN. You mine for water, in other words?

Delegate FARRINGTON. Yes.

It is just a question of getting the land and the water together, Mr. Chairman, and, as you know, this bill was passed by the House and contains funds for this purpose and I do strongly urge that the funds be retained.

RIVERS AND HARBORS

Delegate FARRINGTON. If I may take the liberty to do so, Mr. Chairman, I would like to say that although I realize that this is the Reclamation Subcommittee and that the Civil Functions Subcommittee has concluded its hearings, I have heard since that time that there might be a possibility that the committee would consider in-

creasing the total appropriations for rivers and harbors. I am at this time attempting to get our harbor project in the next year's budget. In this year's budget we have for the first time in 15 years appropriations for maintenance and construction repairs and dredging for all of our harbors, totaling about $1,010,000, which is very necessary and which we appreciate and hope will stay there. This is of first importance and priority to us.

But if by any chance the committee should decide to increase the appropriations for our harbors this year for the development of our trade and defense I would like to see priority given to Kawaihae Harbor on the Island of Hawaii which has had an authorization for some time of something like $6,020,000. Money for the plans in the amount of $50,000 has been appropriated and the plans will be completed this year. The Territory of Hawaii has already built at its own expense an entrance channel and barge channel as a part of the entire project.

I also would like to see money appropriated if that increase is made for plans for Nawiliwili Harbor on the island of Kauai which was authorized in the last Congress.

Thank you very much.

Chairman HAYDEN. I will instruct the clerk that this part of your testimony be called to the attention of the Subcommittee when we consider the estimate of the Corps of Engineers.

Delegate FARRINGTON. Thank you very much. That completes my statement.

WATER PROJECT AUTHORITY OF CALIFORNIA

STATEMENT OF ROBERT L. McCARTY, ATTORNEY AT LAW, WASHINGTON, D. C., FOR NORTHCUTT ELY, ATTORNEY, WASHINGTON, D. C., AND A. D. EDMONSTON, STATE ENGINEER AND EXECUTIVE OFFICER, WATER PROJECT AUTHORITY OF CALIFORNIA

CENTRAL VALLEY PROJECT OF CALIFORNIA

Chairman HAYDEN. Mr. McCarty?

Mr. MCCARTY. Mr. Chairman, my name is Robert L. McCarty. I am a member of the law firm of Ely, McCarty & Duncan with offices in the Tower Building, Washington, D. C. Mr. Ely is special counsel for the water project authority of the State of California. I appear before you in his unavoidable absence. I appear as well for Mr. A. D. Edmonston, State engineer of California and executive officer of the water project authority of that State whose schedule also prevented him from coming before you. Our testimony concerns appropriations for the Central Valley project of California.

Chairman HAYDEN. Mr. Edmonston's prepared statement will be included in full in the record.

Mr. MCCARTY. Thank you. If I may, I will just summarize that very briefly.

The statement points out that pursuant to the regular duties of the water project authority a complete report was prepared on the status of construction of the Central Valley project, filed with the authority and reported out by resolution as approved. It calls for a total appropriation of $21,245,000 for fiscal year 1956.

The substantial difference in that figure from that presented in the budget of $14 million is in connection with the Sacramento River division and the Sacramento canals unit. The water project authority requests $10 million for that, whereas the Federal figure is, I believe, in the vicinity of $3,300,000.

PREPARED STATEMENTS

I know, Mr. Chairman, through your many years with this committee that you are completely acquainted with the Central Valley project and the responsibilities of the water project authority in connection with it, and accordingly to spare your time I will simply insert my statement for the record and ask that it be printed as though read. If that is possible for Mr. Edmonston's statement I would also appreciate that.

Chairman HAYDEN. Both statements will be included in the record.

(The statements referred to follow:)

STATEMENT OF ROBERT L. MCCARTY FOR NORTHCUTT ELY, SPECIAL COUNSEL, WATER PROJECT AUTHORITY OF THE STATE OF CALIFORNIA

My name is Robert L. McCarty. I am a member of the law firm of Ely, McCarty & Duncan with offices in the Tower Building, Washington, D. C. Mr. Ely is special counsel for the water project authority of the State of California. I appear before you in his unavoidable absence. I appear as well for Mr. A. D. Edmonston, State engineer of California and executive officer of the water project authority of that State whose schedule also prevented him from coming before you. Our testimony concerns appropriations for the Central Valley project of California.

The California Legislature authorized the Central Valley project in 1933 as a State project, with construction to be under the direction of the water project authority of California. Revenue bonds to finance construction were offered by the authority to the Public Works Administration of the Federal Government. PWA approved the project, but on the condition that it be constructed by the Bureau of Reclamation as a Federal project, with financing to be in accordance with reclamation law. Actual work on the project has been in progress since 1935.

Although this is a Federal project, the water project authority has the responsibility for the State of making continuing studies of progress and of formulating recommendations for Federal appropriations believed necessary to the most economic development of the project. These recommendations were to have been offered by Mr. Edmonston. Since he could not arrange to be here today he has asked that I present his statement to you.

In furtherance of the original intent of the State legislature in authorizing the project as State owned and controlled, that body in 1952 directed the water project authority to study and report on the possibility of effecting a transfer of the Central Valley project from the Federal Government to the State. A draft proposal was submitted to the various Government agencies for comment and a report sent to the State legislature by the water project authority in February of this year. The legislature has established a joint legislative committee on water problems, one of this committee's responsibilities being to study the feasibility of the transfer of the Central Valley project to State ownership.

A difficulty in State studies on this matter has been the problem of getting conclusive answers from the Federal departments. In this connection I would like to offer for the record the most recent communications on this matter, to be inserted at the end of our testimony.

STATEMENT OF A. D. EDMONSTON, EXECUTIVE OFFICER OF THE WATER PROJECT AUTHORITY OF THE STATE OF CALIFORNIA, ON DEPARTMENT OF INTERIOR APPROPRIATIONS WITH REFERENCE TO AN APPROPRIATION FOR THE CENTRAL VALLEY PROJECT OF CALIFORNIA FOR THE FISCAL YEAR 1956

Mr. Chairman and members of the committee, I am A. D. Edmonston, State engineer of California and executive officer of the water project authority of the

State, on whose behalf I am appearing before you today in support of a request for an appropriation of $21,245,000 for the Central Valley project for the fiscal year 1956.

The water project authority, created by State legislative act in 1933, is the official representative of the State of California in matters pertaining to the Central Valley project, units of which have been constructed or are now under construction by the Bureau of Reclamation of the Department of the Interior. The authority has been diligent in furthering the construction of the Central Valley project and has interested itself in matters concerning the sale of water and power made available by the project.

The work on the originally authorized units of the Central Valley project is practically completed, and the project is now functioning as planned and designed, in producing and transporting water and electric power to areas of use. Only sufficient funds to do incidental work on these units are still required.

Units of the project now nearing completion are the Folsom powerplant and the Nimbus afterbay powerplant of the American River development. Folsom Dam started storing the waters of the American River on March 22, 1955, and the first of three 54,000-kilowatt Folsom generators was placed in service on May 20, 1955. The first of two 6,750-kilowatt Nimbus units started generating on May 2, 1955. The Sly Park project of the American River development is expected to be completed by July 1, 1955.

Much work remains to be done on the works of the Sacramento canals unit, authorized for construction by the Bureau of Reclamation in September 1950.

As in the past years, the water project authority has had its engineers prepare a report covering the amounts of appropriations previously made for the Central Valley project through the fiscal year 1955; status of construction work on, and the costs of, the active features; status of the presently unauthorized features; and a recommendation as to the amounts of money which could be advantageously used for the project in the fiscal year 1956.

This report was presented to the water project authority at its meeting on February 16, 1955. At that meeting the authority adopted a resolution recommending the appropriation of the following amounts for expenditure on the Central Valley project features during the fiscal year 1956:

1. Shasta Division:	
Shasta Dam and Reservoir	$70,000
Shasta powerplant and switchyard	850,000
Keswick Dam and Reservoir	7,000
Keswick powerplant and switchyard	21,000
Subtotal	948,000
2. Sacramento River Division: Sacramento canals	10,000,000
3. American River Division:	
Folsom power facilities	1,000,000
Folsom transmission facilities	300,000
Nimbus fish protection facilities	280,000
Sly Park project	20,000
Subtotal	1,600,000
4. Regional office:	
Water rights	500,000
Preference customer meters	20,000
Radio network	2,000
Subtotal	522,000
5. Delta Division:	
Delta fish protection facilities	1,345,000
Delta cross-channel	50,000
Contra Costa Canal distribution system	400,000
Delta-Mendota Canal	200,000
Tracy switchyard	100,000
Subtotal	2,095,000

6. Friant Division:	
Madera Canal	$280,000
Friant-Kern Canal	800,000
Friant-Kern distribution system	5,000,000
Subtotal	6,080,000
Total	21,245,000

A copy of the resolution of the water project authority and a copy of the report entitled, "Central Valley Project—Construction Progress, Status of Costs and Recommendations for Congressional Appropriations for Fiscal Year 1956," January 1955, are being filed with your committee together with this statement.

RESOLUTION OF THE WATER PROJECT AUTHORITY OF THE STATE OF CALIFORNIA ADOPTED AT SPECIAL MEETING ON FEBRUARY 16, 1955

Whereas the executive officer has submitted to the water project authority of the State of California a report entitled "Central Valley Project—Construction Progress, Status of Costs and Recommendations for Congressional Appropriations for Fiscal Year 1956," dated January 1955; and

Whereas in the foregoing report the executive officer recommends that the Congress of the United States be requested to appropriate the sum of $21,245,000 to the United States Bureau of Reclamation for expenditure on the Central Valley project during the fiscal year 1956, as follows:

1. Shasta Division:	
Shasta Dam and Reservoir	$70,000
Shasta powerplant and switchyard	850,000
Keswick Dam and Reservoir	7,000
Keswick powerplant and switchyard	21,000
Subtotal	948,000
2. Sacramento River Division: Sacramento canals	10,000,000
3. American River Division:	
Folsom power facilities	1,000,000
Folsom transmission facilities	300,000
Nimbus fish protection facilities	280,000
Sly Park project	20,000
Subtotal	1,600,000
4. Regional office:	
Water rights	500,000
Preference customer meters	20,000
Radio network	2,000
Subtotal	522,000
5. Delta Division:	
Delta fish protection facilities	1,345,000
Delta cross channel	50,000
Contra Costa Canal distribution system	400,000
Delta-Mendota Canal	200,000
Tracy switchyard	100,000
Subtotal	2,095,000
6. Friant Division:	
Madera Canal	280,000
Friant-Kern Canal	800,000
Friant-Kern distribution system	5,000,000
Subtotal	6,080,000
Total	21,245,000

Now, therefore, be it

Resolved, by the water project authority of the State of California, That the 84th Congress, 1st session, of the United States be requested to appropriate in the 1956 fiscal year budget of the United States Bureau of Reclamation, the sum of $21,245,000 for construction of the Central Valley project in accord with the foregoing recommendations of the executive officer; and be it further

Resolved, That the executive officer of this authority be authorized and directed to make representations before the appropriate bodies in support of this resolution; and be it further

Resolved, That copies of this resolution be transmitted to the President of the United States, the Secretary of the Interior, the Commissioner of Reclamation, chairmen of the Appropriations Committees of the Congress, the Director, Bureau of the Budget, and to the California Representatives in the Congress.

TRANSFER OF CENTRAL VALLEY PROJECT TO STATE

Mr. McCARTY. As I believe you may also know, the water project authority, pursuant to an act of the State legislature which originally authorized the Central Valley project as a State project back in the early thirties has, by act of legislature in 1952, been continuing studies of the feasibility of the transfer of that project from the Federal Government to the State. That matter was submitted by report to the State legislature in February of this year.

A difficulty in connection with coming up with the final report has been the problem of getting conclusive determinations from the Department of the Interior as to the terms under which the Federal Government might be willing to negotiate a transfer of the project.

In that connection, if I may, and in view of its general interest, I would like to offer for the record a copy of the draft proposal which was submitted to the departments of Government by the water project authority in July of last year, as well as a memorandum of a meeting of Secretary Aandahl and other officials had with Mr. Edmonston in November of 1954, and finally, to reflect the present status, a letter written by Mr. Edmonston to Secretary Aandahl in May of this year reflecting the two final issues which need to be resolved.

Chairman HAYDEN. I think it is important that they be included in the hearing.

Mr. McCARTY. Thank you very much, Mr. Chairman.

(The information referred to follows:)

WATER PROJECT AUTHORITY OF THE STATE OF CALIFORNIA,
Sacramento, Calif., July 23, 1954.

Mr. RALPH A. TUDOR,
Under Secretary of the Interior, United States Department of the Interior, Office of the Secretary, Washington 25, D. C.

DEAR MR. TUDOR: In contemplation of an early conference between representatives of the water project authority and officials of the Department of the Interior as requested in my letter to you of July 13, 1954, there is enclosed herewith a proposal to the United States Department of the Interior for State acquisition of the Central Valley project, dated July 1954, which was prepared by me as State engineer and executive officer of the authority. The transmittal of the proposal at this time is to enlarge the scope of the conference and to afford officials of the Department of the Interior an opportunity to examine the proposal in advance thereof.

This proposal is submitted by me, as executive officer, pursuant to the direction of the legislature contained in item 428.5 of the California Budget Act of 1952, which appropriated funds for "use in connection with acquisition by the State of the Central Valley project" and reaffirmed by the legislature in 1954; action taken by the water project authority on September 16, 1952, in approving a program of work and studies to be carried on pursuant to said legislative direction;

subsequent action taken by the authority in furtherance of negotiations with the Federal Government for State acquisition; and the authorizations implicit in that program of work, that the executive officer explore bases of agreement between the United States and the State of California relating to such acquisition. The authority in adopting the program of work relating to State acquisition, approved a recommendation of the executive officer that early priority be given to the drafting of legislation for introduction in the Congress.

At preliminary conferences relating to State acquisition between officials of the State of California, officials of the Department of the Interior, and other Federal officials, some progress was made in arriving at the bases and criteria to govern State acquisition. In addition, repayment analyses and other information have been made available to the State by the Department of the Interior through the cooperation of the Washington office of the Bureau of Reclamation and the office of region No. 2. However, as outlined in my letter to you of July 13, 1954, additional information from the Department is required regarding interest-free financing and other matters relating to State acquisition, and also that the question of reimbursable cost allocations be resolved.

It is also necessary that agreement be reached regarding the project units to be acquired, including completed units, other presently authorized units, and additional units; and regarding the terms and conditions of proposed State acquisition. The enclosed proposal is intended to expedite consideration of these matters in accordance with the memorandum of meeting on California's proposal for State acquisition of the Central Valley project, dated November 19, 1953.

It is understood that bases of agreement reached at the contemplated conference are subject to approval by the water project authority, and that any agreement for State acquisition subsequently entered into between the Secretary of the Interior and the authority must be made pursuant to authorization or approval of the Congress.

Very truly yours,

A. D. EDMONDSTON,
State Engineer and Executive Officer, Water Project Authority.

PROPOSAL TO THE UNITED STATES DEPARTMENT OF THE INTERIOR FOR STATE ACQUISITION OF THE CENTRAL VALLEY PROJECT

I. PROPERTY TO BE ACQUIRED

1. Act and contract

It is assumed that acquisition of federally authorized units and features of the Central Valley project by the Water Project Authority of the State of California will be authorized by appropriate enabling legislation to be enacted by the Congress. Such act will authorize and direct the Secretary of the Interior to negotiate and enter into a contract with the authority for the sale and transfer of such units and features to the authority in accordance with the provisions of the authorizing legislation.

2. Property included

The property to be acquired will include all canals, dams and reservoirs, pumping plants, conduits, powerplants and switchyard, transmission facilities, water distribution systems, water rights, radio network, materials, supplies and equipment, and all works, real and personal property and property rights appurtenant, or incident thereto. All such properties and works of each unit at the time it is acquired by the authority shall be verified by an inventory to be made jointly by the United States and the authority.

3. Classification of units for acquisition

Acquisition will be provided for under three major categories:

(1) Completed units of the project, including water distribution systems (presently authorized units completed by the date of initial acquisition).

(2) Other presently authorized units (Sacramento canals unit, Trinity River division, and water distribution systems, if any, uncompleted at the date of initial acquisition).

(3) Additional units (units which may be added to the project in the future).

II. COMPLETED UNITS

1. Units included

To be included for acquisition under the category of completed units will be all of the presently authorized units of the project (including all water distribution systems) which are expected to be completed by the date of initial acquisition.

This will include all presently authorized units, except the Sacramento canals unit, Trinity River division, and possibly a few of the water distribution systems which may not be completed by such dates. Acquisition of such completed units shall be in accordance with the provisions which follow.

2. Transfer of title

Transfer of all completed units of the project (including completed water distribution systems) to the authority will be made at the earliest practicable date following enactment of the authorizing act. This date of transfer is to be known as the date of initial acquisition and will be so stated in the contract to be executed. (It is believed the initial acquisition can be accomplished within 1 year following the date of enactment of the authorizing act.)

On such date of initial acquisition, the authority shall make the required payments to the United States, based on estimated costs, as hereinafter provided; it shall take over the control, operation, and maintenance of such completed units; and title to all properties and works in connection therewith shall be conveyed by the United States to the authority.

3. Total costs

The total construction costs, the total operation and maintenance costs, and the total amount of the reserve fund for replacements, for each such completed unit as of the date of initial acquisition shall be determined by audit, with officials or designated representatives of the authority having free access to such books and records of the United States as may be necessary to review such audit.

Costs of movable property, including but not limited to trucks, automobiles, tractors, excavating equipment, and similar facilities shall be the purchase price less reasonable depreciation to the date of initial acquisition. The cost of spare parts, materials, and supplies shall be the actual purchase price, and the quantities verified by an inventory made jointly by the United States and the authority as close to the date of initial acquisition as practicable.

4. Cost allocations

Allocations of costs shall be made by the Secretary of the Interior, and as to those features or units of the project constructed by the Corps of Engineers, allocations of cost shall be made after consultation with the Secretary of the Army. The legislative history of the project, including authorizing acts, committee reports, reports to the Congress, justification documents, and similar sources, including the report of June 10, 1946 of the Committee on Allocation of Costs, Central Valley Project Studies, problems 8–9, shall be considered and used as the basis for such allocations. The Secretary of the Interior shall as soon as possible and prior to the execution of the contract of acquisition, submit to the authority his proposed allocations, including full information as to the bases and methods employed in making each of such allocations and shall give consideration to the authority's comments thereon prior to his announcement of allocations.

Construction and other costs of the project shall be allocated to flood control, navigation, protection and propagation of fish and wildlife, commercial power, irrigation, municipal and industrial water supply, water distribution systems, future use, and any other recognized function or functions, with separate allocations for each project unit insofar as possible.

Construction costs, and operation and maintenance costs, incurred prior to the date of initial acquisition and allocated to authorized nonreimbursable functions, and operation and maintenance costs incurred prior to such date of initial acquisition and allocated to future use, shall be excluded from the costs to be paid by the authority to the United States in acquiring the project.

In connection with allocations of nonreimbursable flood control and navigation costs, it is proposed by the authority that such costs for the initial project units, including the American River development, be allocated to these functions in accordance with the principles established by House Document 146 (80th Cong., 1st sess.) approximately as follows (more exact figures with supporting detail to be furnished later by the authority):

Flood control	$86,000,000
Navigation	18,000,000
Total	104,000,000

Costs of protection and propagation of fish and wildlife to be nonreimbursable in accordance with Public Law 732 (60 Stat. 1080).

5. Unamortized balance of construction costs

The unamortized balance of construction costs allocated to each function shall be determined by deducting from the total construction costs allocated to such function: (1) Revenues received by the United States from the project prior to the date of initial acquisition applicable to the repayment of such costs; (2) Any unapplied or unused advance payments by water or power users; and (3) Other applicable credits.

6. Replacement fund

The revenues credited to the replacement fund in each year less the cost of replacement paid out of the fund in such year, for each completed unit of the project, shall be accumulated at 2Q percent interest compounded annually to the date of initial acquisition. Such accumulated total of the replacement fund for all units shall either be paid to the authority on the date of initial acquisition, or applied as a credit to the amount to be paid by the authority to the United States for the acquisition of the project by assignment to the respective functions for which accumulated.

7. Nonreimbursable expenses

The Secretary of the Interior shall estimate the annual operation and maintenance and replacement costs properly allocable to nonreimbursable functions of the project over a period of 50 years from and after the date of initial acquisition; and the authority shall be given a credit for the total amount of the present worth of such costs, which the United States would otherwise have to pay, on payments to be made by the authority for the acquisition of the project.

8. Future use costs

Construction costs allocated to future use to be included in payments by the authority for the acquisition of the project shall be determined as the present worth of such costs, less operation, maintenance and replacements attributable thereto, based upon estimates as to when it may be reasonably anticipated such construction costs would be repaid to the United States if the project were not acquired by the authority.

9. Power and municipal water costs

Repayment of construction costs allocated to commercial power and to municipal and industrial water supply (including municipal and industrial water distribution systems) from project revenues, prior to the date of initial acquisition, shall include interest at 2½ percent per annum from and after the date such facilities first went into operation.

10. Irrigation costs

Repayment of construction costs allocated to irrigation and to irrigation water distribution systems from project revenues, prior to the date of initial acquisition, shall be without a charge for interest.

Construction costs allocated to irrigation and to irrigation water distribution systems to be included in payments by the authority for the acquisition of the project shall be the present worth of such costs as determined on the assumption of repayment of the unamortized balance of such costs (as of the date of initial acquisition) in 40 equal annual installments, with an interest cost to the United States as set forth below, and with the first installment assumed to become due on July 1, 1960, or on July 1 of the year following an assumed development period of 5 years after completion of the unit or water distribution system involved, whichever is the later.

11. Interest rate

The interest rate to be assumed in connection with determining present worth of nonreimbursable expenses, future use costs and irrigation costs shall be 2½ percent per annum.

The interest rate to be carried on revenue bonds of the authority which are issued by the authority to the United States in payment for acquisition of the project shall likewise be 2½ percent per annum.

12. Payments by authority

On the date of initial acquisition, the authority shall make payments to the United States in the amounts and manner as follows:

(1) In cash, for 90 percent of the estimated total amount of the unamortized balance of construction costs allocated to commercial power, and to municipal

and industrial water supply (including such costs allocated to municipal and industrial water distribution systems).

(2) In revenue bonds of the authority, equal in principal amount to 90 percent of the present worth of the estimated total amount of the unamortized balance of construction costs allocated to irrigation and to irrigation distribution systems.

As soon thereafter as final costs and revenues, as of the date of the initial acquisition, are determined, the authority shall make payments to the United States in the amounts and manner as follows:

(1) In cash, for the difference between the actual total amount of the unamortized balance of construction costs allocated to commercial power, and to municipal and industrial water supply (including such costs allocated to municipal and industrial water distribution systems), and the 90 percent payment previously made.

(2) In revenue bonds of the authority, equal in principal amount to the difference between the actual total amount of the present worth of the unamortized balance of construction costs allocated to irrigation and to irrigation water distribution systems, and the 90 percent payment previously made.

III. OTHER PRESENTLY AUTHORIZED UNITS

1. Units included

To be included for acqusition under the category of "Other presently authorized units" are the Sacramento canals unit, the Trinity River division, and possibly a few of the presently authorized water distribution systems which may not be completed by the date of initial acquisition. The construction of each of the respective units under this category either has not started or is at an early stage and may not be completed by the date of initial acquisition.

2. Water rights

The authority shall be responsible for acquiring and perfecting rights to the use of the water required by or in connection with the operation by the Authority of the Sacramento canal unit and the Trinity River division.

3. Completion of construction

The United States will proceed with diligence to complete the construction of each of the units included under this category, subject only to funds being available for such construction from the Central Valley project fund (to be created under the terms of the act), or through appropriations by the Congress or otherwise. Final plans for the Sacramento canals unit and the Trinity River division shall be subject to approval by the authority.

4. Assumption of operation and maintenance by the authority

Upon 90 days written notice from the Secretary of the Interior of the completion of any unit (including water distribution systems) under this category, or any major part of such unit useful to the authority, the authority shall assume responsibility for the control, operation, and maintenance of such unit or major part thereof.

5. Transfer of title

On such date as may be agreed upon, to be known as the "date of acquisition," and which date shall be within 12 months from and after written notice by the Secretary of the Interior to the authority of the final completion of any unit (including water distribution systems) under this category but less than 6 months from and after submission to the authority of his allocations of the actual construction costs of such unit, the authority shall make the payments to the United States as hereinafter provided, and title to all properties and works in connection with such unit shall be conveyed by the United States to the authority.

6. Determination of final costs, expenses, etc.

Procedure and provisions in connection with the determination of total costs, cost allocations, unamortized balance of construction costs, replacement fund, nonreimbursable expenses, and future use costs shall be applied to units under this category in the same manner as set forth hereinbefore in respect to units under the category of completed units except that the date of acquisition shall be used instead of the date of initial acquisition and the interest rate per annum to be used shall be as hereinafter provided.

7. Power and municipal water costs

Repayment of construction costs of any unit under this category allocated to commercial power and to municipal and industrial water supply (including municipal and industrial water distribution systems) from project revenues, prior to the date of acquisition, shall include interest at the rate per annum hereinafter provided from and after the date such facilities first went into operation.

8. Irrigation costs

Repayment of construction costs of any unit under this category allocated to irrigation and to irrigation water distribution systems from project revenues, prior to the date of acquisition, shall be without a charge for interest.

Construction costs of any unit under this category allocated to irrigation and to irrigation water distribution systems to be included in the payment by the authority for acquisition of such unit shall be the present worth of such costs as of the date payment thereof is made by the authority and as determined on the assumption of repayment of the unamortized balance of such costs (as of the date of acquisition) in 40 equal annual installments, with an interest cost as set forth below, and with the first installment assumed to become due on July 1 of the year following the end of the development period fixed by the Secretary of the Interior for such unit.

9. Interest rate

The interest rate to be assumed or used in connection with the items of nonreimbursable expenses, future use costs, repayment of commercial power and municipal and industrial water supply costs prior to the date of acquisition, and present worth of irrigation costs for any unit under this category, construction of which was commenced prior to the date of the authorizing legislation enacted by the Congress, shall be 2½ percent per annum.

Such interest rate to be used for similar items in connection with any and all units (including water distribution systems) under this category construction of which is commenced subsequent to the date of the authorizing act shall be determined by the Secretary of the Treasury as of the time the first appropriation was made for initiating construction of such unit, by calculating the average yield to maturity on the basis of daily closing market bid quotations during the month of June next preceding the fiscal year for which such appropriation was enacted, on all interest-bearing marketable public debt obligations of the United States having a maturity date of 15 or more years from the first day of said month, and by adjusting such annual yield to the nearest one-eighth of 1 percent.

The interest rate to be carried on revenue bonds of the authority and issued by the authority to the United States in payment for the acquisition of any unit (including irrigation water distribution systems) under this category shall be equal to the interest rate used in determining the present worth of construction costs of such unit allocated to irrigation or to irrigation water distribution systems, respectively.

10. Payment by the authority

On the date of acquisition for any unit under this category, the authority shall make payment to the United States as follows:

In cash, for the total amount of the unamortized balance of construction costs of such unit allocated to commercial power, and to municipal and industrial water supply (including such costs allocated to municipal and industrial water distribution systems).

On July 1 of the year following the end of the development period fixed by the Secretary of the Interior for such unit, (including irrigation water distribution systems) the authority shall make payment to the United States in the amount and manner as follows:

In revenue bonds of the authority, equal in principal amount to the total amount of the present worth of the unamortized balance of construction costs of such unit allocated to irrigation or to irrigation water distribution systems, as the case may be.

IV. ADDITIONAL UNITS

1. Units included

Under the category of "Additional units" are to be included units which may be added to the project in the future, upon approval by the United States and the authority. Approval by the United States shall be by means of authorizing legislation enacted by the Congress.

The United States and the authority will cooperate in the investigation, planning, design, financing and construction of such additional units but no such unit

shall be added to the project which would impair the financial feasibility of the project as a whole, or which would result in an increase in the cost of water to existing users.

2. Construction by the authority

Any such additional unit may be constructed either by the United States or the authority, as may be agreed upon. In the event of construction by the authority, the United States will assist in financing the construction of the unit to the extent of making grants to the authority equal to construction costs of the unit allocated to nonreimbursable functions and present worth of nonreimbursable expenses, and in making noninterest bearing loans to the authority equal to the construction costs of such unit allocated to irrigation and to irrigation water distribution systems. Repayment of any such loan to the United States may be in revenue bonds of the authority equal in principal amount to the present worth of such loan. Such present worth shall be determined, and the interest rate to be assumed and payments to the United States shall be in accordance with similar terms and conditions to those provided in connection with acquisition of units under the category of "Other presently authorized units."

3. Construction by the United States

In the event of construction of any such additional unit by the United States, acquisition of such unit by the authority shall be under the same terms and conditions as provided for the acquisition of units under the category of "Other presently authorized units."

V. GENERAL TERMS AND CONDITIONS

1. Revenue bonds of the Authority

All revenue bonds of the Authority issued to the United States shall be negotiable and carry an interest rate equal to that used in determining the present worth of construction costs allocated to irrigation or irrigation water distribution systems paid by such bonds. The bonds shall be 50-year term bonds and secured by a first lien on the gross revenue of the project after deducting the cost of operation and maintenance, payments into replacement funds, and fixed charges on bonds of the Authority other than those issued to the United States. Other terms and conditions of such bonds shall be similar to those of all other bonds issued by the Authority.

2. Rates and charges

The Authority shall provide for and maintain rates and charges for project water and power service such that the gross revenues from the project will be at least sufficient to pay:

1. Annual operation and maintenance costs.
2. Annual amounts to maintain adequate replacement funds.
3. Annual fixed charges, as the same become due and payable, on all of the bonds issued by the Authority.

3. Contracts of the United States

The Authority shall accept any and all lawful rights and obligations of the United States under all contracts, agreements, choses in action, judgments and similar documents entered into prior to the date of execution of the project acquisition contract between the United States and the Authority, and the Authority shall keep and perform any and all such rights and obligations of the United States, excepting that the same may be modified or revised by mutual agreement of the Authority and those entities with whom such contracts or agreements may have been made by the United States, or otherwise, pursuant to law.

From and after such date of the project acquisition contract between the United States and the Authority, the Authority shall have the right to make and shall assume the responsibility for making all additional contracts or agreements required and shall also assume the responsibility for settling all then outstanding water-rights litigation involving the project so acquired, or any unit thereof.

None of the foregoing provisions of this paragraph 3 shall, insofar as the Authority is concerned, apply to contracts or agreements entered into or to be entered into by the United States in connection with the actual construction of project works or facilities.

4. Operation for flood control and navigation

The Authority shall operate the project in conformance with reasonable and appropriate regulations as promulgated by the Secretary of the Army, after consultation with the Secretary of the Interior and with the Authority, relating to the

operation of and release of water from project reservoirs for flood control and navigation purposes.

5. Other terms and conditions

The Authority shall also agree to other terms and conditions, such as:

(1) To maintain the project and each unit thereof in as good and efficient operating condition as when received from the United States, reasonable wear and damage by the elements excepted.

(2) After the care, operation, and maintenance of the project or any unit thereof has been assumed by the Authority, to save the United States, its officers, agents, and employees harmless as to any and all injury and damage to persons and property which may arise out of the care, operation, and maintenance thereof.

(3) To provide for the transfer of employees of the United States engaged in the operation or maintenance of the project to similar positions and State Civil Service classifications for project operation and maintenance under the Authority, insofar as possible.

(4) To provide for the determination if disputes or disagreements, as to the interpretation or performance of the provisions of the project acquisition contract, either by arbitration or court proceedings.

(5) Other miscellaneous terms and conditions, usually required in contracts with the United States, such as the nondiscrimination clause and Members of Congress clause.

VI. CENTRAL VALLEY PROJECT FUND

The authorizing act enacted by the Congress shall provide for the creation in the Treasury of the United States of a special fund to be known as the Central Valley project fund. All payments made by the Authority to the United States for the acquisition of the project or any one or more units thereof are to be deposited in such fund. Provision would be made that the fund is to be available, subject to appropriations by the Congress, exclusively, first, for completing construction of the Sacramento canals unit and Trinity River division, and any presently authorized water distribution systems not completed as of the date of initial acquisition; and second, for the construction of units which may be added to the project in the future.

SUPPORTING DETAIL FOR ALLOCATION TO NONREIMBURSABLE FUNCTIONS AS CONTAINED IN THE PROPOSAL TO THE UNITED STATES DEPARTMENT OF THE INTERIOR FOR STATE ACQUISITION OF THE CENTRAL VALLEY PROJECT

The following is quoted from page 5 of the subject proposal:

"In connection with allocations of nonreimbursable flood control and navigation costs, it is proposed by the Authority that such costs for the initial project units, including the American River development, be allocated to these functions in accordance with the principles established by House Document 146 (80th Cong., 1st sess.) approximately as follows: (more exact figures with supporting detail to be furnished later by the Authority).

"Flood control	$86,000,000
Navigation	18,000,000
Total	104,000,000"

The above amounts were developed by the methods established by House Document 146 which were based on the Central Valley project authorizing act of August 26, 1937 (50 Stat. 850), which read in part as follows: "*And provided further*, That the said dam and reservoir shall be used, first, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic uses; and, third, for power."

Navigation

From United States Bureau of Reclamation preliminary capital cost allocation of selected features, Central Valley project, California, January 1954, the total cost of Shasta Dam and Reservoir was shown as $117,350,000. This represents an increase of 2.44 percent over the $114,652,600 estimated cost shown in House Document 146 presumably resulting from increased construction costs over those prevailing at the time House Document 146 was prepared. This percentage of increase has a bearing on the allocation to navigation.

House Document 146 indicated that the navigation benefits exceeded the estimated annual costs of an alternative system of locks and dams to provide the same navigation benefits. The allocation of project costs to navigation was conse-

quently based on the cost of the alternative system. The total annual costs of the alternative system were capitalized in House Document 146 at 3 percent for 50 years to arrive at a justified expenditure in Shasta for navigation of $12,300,000. This amount should be increased by 2.44 percent to $12,600,000 because of increased cost of construction, as noted above. An increase in operating costs has also undoubtedly occurred but has not been taken into account. The addition of $154,000 representing the capitalized value of reduced navigation maintenance below Sacramento and $5,630,000 for elimination of navigation costs associated with construction of a salt water barrier as provided in House Document 146, results in a total cost allocation of Shasta to navigation of $18,384,000.

Flood Control

For Shasta and Friant Dams and Reservoirs, the cost of alternative flood control projects exceeded the value of the benefits as estimated in House Document 146. Consequently the allocations to flood control of the cost of Shasta and Friant were based on the capitalized value of the flood control benefits. The benefits resulted from reduction in flood damage and change in land use attributable to the flood control operation of the 2 reservoirs as set out in the report of the committee on problems 8 and 9 of the Central Valley project studies. The evaluation of damages and benefits in the committee report was made on the same basis as was used for the comprehensive flood-control survey report of the Corps of Engineers, Department of the Army on the Sacramento-San Joaquin Basin streams. The comprehensive report together with a supplement thereto were published as House Document No. 367, 81st Congress, 1st session. The flood damage estimates in the supplement were greater than in the original report as a result of changes in economic conditions and the uses made of affected lands which have taken place since the preparation of the original report. The proportions by which these estimates were increased have been used in revising the estimated benefits resulting from reduction in flood damage and improved land use by reason of the flood-control operations of Shasta and Friant. Further changes in economic conditions increasing flood control benefits have undoubtedly occurred but have not been taken into account. The revised estimates of average annual benefits attributable to Shasta and Friant flood control operations are $805,200 and $329,500, respectively. These amounts capitalized on the basis of a 100-year amortization period at a 3 percent interest rate, as in House Document 146, results in cost allocations to flood control of $25,443,000 for Shasta and $10,412,000 for Friant.

For the American River development, allocation of the cost of Folsom Dam to flood control was developed by the Bureau of Reclamation in connection with development of House Document No. 73, 83d Congress, 1st session, dated January 29, 1953, prepared in conformance with the act of September 26, 1950 (Public Law 839, 81st Cong., 2d sess.) which reauthorized the project to include the Sacramento canals. On page 89 of the report making up House Document No. 73, under the heading "Capital cost allocation of the Central Valley project before and after including the Sacramento canals unit" is the statement "Total project costs were then allocated among the various functions to be served, following essentially the same methods of cost allocation as presented in House Document 146, 80th Congress, 1st session." The estimated benefits and alternative costs used in arriving at the flood control allocation for Folsom used in House Document 73 have not been obtained by this office. A cost allocation prepared by the Sacramento district, Corps of Engineers, United States Army, dated December 31, 1953, entitled "Folsom Reservoir Project, American River, Calif, Report on Preliminary Cost Allocation Studies," however, shows annual flood control benefits of $1,630,000 and alternative annual costs of $1,610,000 (table 6). Applying the methods of House Document 146 by capitalizing the lesser of the two figures on the basis of a 100-year amortization period at a 3 percent interest rate results in an allocation of the cost of Folsom to flood control of $50,874,000.

Summary of proposed allocations

Flood control:	
Shasta	$25,443,000
Friant	10,412,000
Folsom	50,874,000
Total	86,729,000
Navigation: Shasta	18,384,000
Total flood control and navigation	105,113,000

Cost of Central Valley project facilities

Shasta Dam and Reservoir	$117, 350, 000
Keswick Dam and Reservoir	9, 239, 000
Friant Dam and Reservoir	22, 023, 000
Folsom Dam and Reservoir	65, 335, 000
Nimbus Dam and Reservoir	8, 639, 000
Sly Park development	7, 008, 000
Subtotal	229, 594, 000
Delta-Mendota Canal	67, 696, 000
Madera Canal	3, 438, 000
Friant-Kern Canal	60, 596, 000
Delta cross channel	2, 513, 000
Contra Costa Canal	7, 100, 000
Subtotal	141, 343, 000
Shasta powerplant and switchyard	22, 474, 000
Keswick powerplant and switchyard	11, 420, 000
Folsom powerplant and switchyard	23, 739, 000
Nimbus powerplant and switchyard	3, 951, 000
Power transmission facilities	27, 536, 000
Subtotal	89, 120, 000
Water rights and ground water studies	8, 611, 000
Investigation, radio network, general property	8, 825, 000
Subtotal	17, 436, 000
Irrigation distribution systems	51, 455, 000
Grand total	528, 948, 000

NOTE.—Costs taken from U. S. Bureau of Reclamation "Preliminary Capital Cost Allocation of Selected Features, Central Valley Project, California" dated January 1954.

MEMORANDUM OF MEETING HELD NOVEMBER 19, 1954, ON A PROPOSAL FOR ACQUISITION OF THE CENTRAL VALLEY PROJECT BY THE STATE OF CALIFORNIA

At the request of the executive officer of the Water Project Authority of the State of California, a meeting was held in the Department of the Interior on November 19, 1954, attended by representatives of the water project authority and the Department of the Interior, Treasury Department, Department of the Army, and Bureau of the Budget. This meeting was a followup of similar meetings held in November 1953, and was for the purpose of considering a draft proposal for State acquisition of the Central Valley project, dated July 1954, hereinafter called the proposal, which was submitted by the executive officer of the water project authority on July 23, 1954, to the Under Secretary of the Interior.

It was the objective of this meeting, that in accordance with the action of the water project authority on November 12, 1954, the representatives of the authority obtain from the Department of the Interior, and other interested Federal agencies, their views on the proposal for State acquisition, including decision of the administration on various policy matters to be furnished by the Department of the Interior in accordance with the memorandum of meeting of November 19, 1953, in order that such views and policy decisions may be transmitted in a report by the authority to the California Legislature convening in January 1955.

It was understood that any views expressed by representatives of the executive branch of the Federal Government are tentative and that final action would necessarily be taken by the President and the Congress, both as to certain policy decisions and as to State acquisition in general. It is also understood that the proposal and views of the water project authority representatives expressed herein are subject to review and approval by the water project authority.

It was also understood that the views of the local interests having contracts with the Department of the Interior should be given due consideration in con-

nection with the review of any legislation which may be introduced to effect such a transfer.

For purposes of convenience in this memorandum, the use of the word "Interior" shall hereinafter mean representatives of the Department of the Interior represented at the meeting; and the use of the word "Authority" shall hereinafter mean the executive officer and other representatives of the Water Project Authority of the State of California present at such meeting.

GENERAL PRINCIPLES

Consideration of the proposal and expressions on it by Interior were based upon and governed by the tentative statement of general principles previously announced by the Department of the Interior, pursuant to the statement of tentative position of the Department of the Interior of November 17, 1953, and the memorandum of meeting dated November 19, 1953, to which reference is specifically made for more detail.

AREAS OF GENERAL AGREEMENT

There was general agreement by Interior to the below listed portions of the proposal. No attempt was made to edit the draft or otherwise agree upon specific wording.

Section I—Property to be acquired

1. Act and contract.
2. Property included.
3. Classification of units for acquisition.

Section II—Completed units

1. Units included.
2. Transfer of title.
3. Total costs.
5. Unamortized balance of construction costs.
6. Replacement fund (revised to show that any irrigation credits would be noninterest bearing).

Section III—Other presently authorized units

1. Units included.
2. Water rights.
4. Assumption of operation and maintenance by the Authority.
5. Transfer of title.
6. Determination of final costs, expenses, etc.

Section IV—Additional units

1. Units included (revised to insert "substantially" immediately preceding "impair" in fourth line of the second paragraph).
3. Construction by the United States.

Section V—General terms and conditions

3. Contracts of the United States (subject to review of the contracts involved by counsel for the United States and the Authority).
4. Operation for flood control and navigation (revised to delete "reasonable and appropriate" preceding "regulation").
5. Other terms and conditions.

In addition, there is general agreement by Interior to features which appear in the proposal relating to interest-free financing by the United States for irrigation, the approximate interest rate to be used in computations, and the nonreimbursability of flood control and navigation allocations.

AREAS OF SUBSTANTIAL QUESTION

The conference revealed several points on which there are substantial differences of opinion between Interior and the Authority. These include:

Cost allocation *(sec. II, art. 4, e. g.)*

The proposal provides that as to existing units of the Central Valley project, the cost allocation should follow the principles of House Document 146, 80th Congress. Interior prefers to sponsor a cost allocation in keeping with the interagency agree-

ment of March 12, 1954, on cost allocations. The extent to which nonreimbursable allocations can be made to the preservation and propagation of fish and wildlife under the provisions of the act of August 14, 1946 (60 Stat. 1080) is under study by Interior, and a determination will be made as soon as practicable.

Nonreimbursable expenses (sec. II, art. 7, e. g.)

The proposal provides that the estimated annual operation, maintenance, and replacement costs for flood control, navigation, and other nonreimbursable functions over a 50-year period be commuted to present worth and that credit in that amount be allowed in establishing the purchase price. Interior believes it would not be appropriate to credit such expenditures for the operation, maintenance, and replacement associated with flood control, navigation, and other nonreimbursable functions, unless such a procedure is established as a national policy.

Future use costs (sec. II, art. 8, e. g.)

The proposal provides that cost of future use facilities (such as extra capacity in canals) be deferred on an interest-free basis in accordance with the principles of House Document 146, 80th Congress and that the present-worth settlement be adjusted accordingly. Interior believes that cost of all works should be included in the total cost to be repaid by the Authority as a current obligation and be treated as are other costs.

Central Valley project fund (sec. VI, e. g.)

The proposal provides that all payments to the United States for project acquisition be placed in a special fund. Only the repayment of capital outlay would be deposited in this fund which would be available, subject to appropriations by the Congress, exclusively for the construction of partially completed and future units in the Central Valley project. Interior takes the view it would be unwise to commit the proposed repayment of the reimbursable portion of the project exclusively for further Central Valley project development.

Interest during construction on costs allocated to power and municipal water (sec. II, art. 9, e. g.)

The proposal provides for interest on the capital cost of existing power and municipal and industrial water facilities beginning when the facilities are first put into operation, in accordance with the principles of House Document 146, 80th Congress. Interior takes the view that their current policy of also charging interest during construction should be applied to such facilities.

POINTS FOR FURTHER CONSIDERATION

Interior is not ready, in connection with the proposal, to report the position of the administration in regard to (1) a present-worth settlement of irrigation investment, and (2) the provisions in the proposal of payment of the irrigation investment by means of revenue bonds, subordinate to revenue bonds sold to the public at large to pay for the power and municipal water costs. Interior reported that progress has been made on attaining the administration's position on the foregoing points and that they would be obtained and furnished to the Authority soon.

Further conferences will be held if requested by the Authority after this material has been furnished.

GENERAL CONCLUSIONS

The proposal is comprehensive and contains the principal elements for consideration and utilization in the preparation of legislation. It is realized and understood that final decisions on any proposal of this nature must be as determined and fixed by act of Congress.

FRED G. AANDAHL,
Assistant Secretary, Water and Power Development,
Department of the Interior.

A. D. EDMONSTON,
State Engineer and Executive Officer,
Water Project Authority of the State of California.

WATER PROJECT AUTHORITY OF THE STATE OF CALIFORNIA,
SACRAMENTO, CALIF., *May 9, 1955.*

Mr. FRED G. AANDAHL,
Assistant Secretary of the Interior,
Washington, D. C.

DEAR MR. AANDAHL: This will confirm the statement I made to you in our conference May 5, 1955.

On November 23, 1954, you and I signed a memorandum summarizing the results of our conference on the possibility of acquisition of the Central Valley project by the State of California. This memorandum summarized "areas of general agreement" and "areas of substantial question," and stated that the Department would soon obtain and furnish to the water project authority the administration's position on—

" * * * (1) a present worth settlement of irrigation investment, and (2) the provisions in the proposal of payment of the irrigation investment by means of revenue bonds, subordinate to revenue bonds sold to the public at large to pay for the power and municipal water costs. * * * "

I think it to the Department's interest as well as ours that you give us your views on these points as soon as possible. If you are unable to agree with the proposal we have submitted, I believe it would be appropriate for you to indicate the modifications that would be required to meet your views. The State has spent a great deal of time and money on this study, and I would like to be able to bring our conferences to the point of a definite statement of the Government's position.

With kind personal regards, I am
Very truly yours,

A. D. EDMONSTON, *Executive Officer.*

JUNE 8, 1955.

CHAPTER ———

SENATE CONCURRENT RESOLUTION NO. 84—RELATIVE TO THE CREATION OF THE JOINT COMMITTEE ON WATER PROBLEMS

Whereas the industry and agriculture of our State is dependent upon an adequate water supply which can be obtained only through the full development and utilization of our water resources; and

Whereas our present water supply is insufficient to fulfill even the present needs of the people of this State and the urgent need for the immediate completion of a comprehensive and coordinated program for the conservation of all of our water resources; and

Whereas much State legislation is pending and contemplated for consideration for the purpose of making the maximum possible beneficial use of the waters of the State; and

Whereas there is much Federal legislation now pending and in contemplation for enactment which would provide for various Federal activities in connection with the solution of our water development and conservation problems, and there is much confusion as to just how California and the Federal Government may best cooperate in solving these problems, and a comprehensive plan should be carefully worked out for such cooperation between them; and

Whereas the Central Valley project is an integral part of the full development of the water resources and it is necessary to study means whereby the State can best assist in accomplishing its completion at the earliest possible date; and

Whereas the San Francisco Bay area and coastal counties are in need, desperately, of an additional supply of fresh water; and

Whereas it is necessary that a study be made of the means by which such a supply can be obtained for this area: Now, therefore, be it

Resolved by the Senate of the State of California, the Assembly thereof concurring, as follows:

1. The joint committee on water problems is hereby created and authorized and directed to ascertain, study, and analyze all facts relating to or in any way bearing upon any of the subjects mentioned in the recitals of this resolution; any and all phases of flood control, river flow control, and equation, domestic use, irrigation, reclamation, and power development of water, including the bearing thereof upon the economic, recreational, and other needs of the people of the State and the relation thereof to the wildlife and other natural resources

of the State; the best means of cooperation with Federal, local, and other governmental agencies; the feasibility of the transfer of the Central Valley project to this State for ownership and operation, including the development of plans for the negotiation of such transfers; and the means for securing an additional fresh-water supply for the San Francisco Bay area and coastal counties, including but not limited to the operation, effect, administration, enforcement, and needed revision of any and all laws in any way bearing upon or relating to the subject of this resolution, and to report thereon to the legislature, including in the reports its recommendations for appropriate legislation.

2. The committee shall consist of 10 members of the senate appointed by the committee on rules thereof, and 10 members of the assembly appointed by the speaker thereof. Vacancies occurring in the membership of the committee shall be filled by the appointing power.

3. The committee is authorized to act during this session of the legislature, including any recess, and after final adjournment until the commencement of the 1957 regular session, with authority to file its final report not later than the 15th day after the constitutional recess of that session.

4. The committee and its members shall have and exercise all of the rights, duties, and powers conferred upon investigating committees and their members by the provisions of the joint rules of the senate and assembly as they are adopted and amended from time to time at this session, which provisions are incorporated herein and made applicable to this committee and its members.

5. The committee or any subcommittee may meet and travel within or outside this State in pursuing the investigations committed to it.

6. The committee has the following additional powers and duties:

(*a*) To select a chairman and a vice chairman from its membership.

(*b*) To contract with such other agencies, public or private, as it deems necessary for the rendition and affording of such services, facilities, studies and reports to the committee as will best assist it to carry out the purposes for which it is created.

(*c*) To cooperate with and secure the cooperation of county, city, city and county, and other local law enforcement agencies in investigating any matter within the scope of this resolution and to direct the sheriff of any county to serve subpenas, orders, and other process issued by the committee.

(*d*) To report its findings and recommendations to the legislature and to the people from time to time and at any time, not later than herein provided.

(*e*) To do any and all other things necessary or convenient to enable it fully and adequately to exercise its powers, perform its duties, and accomplish the objects and purposes of this resolution.

(*f*) To employ engineers and such other technical and clerical assistants as may be necessary to enable the committee to properly conduct its studies.

7. The unexpended balance of the money heretofore made available to the joint committee on water problems, created by Senate Concurrent Resolution No. 13, 1953 regular session, and, in addition thereto, the sum of $30,000 or so much thereof as may be necessary are hereby made available from the contingent funds of the senate and the assembly for the expenses of the committee created by this resolution and its members and for any charges, expenses or claims it may incur under this resolution, to be paid from the said contingent funds equally and disbursed, after certification by the chairman of the committee, upon warrants drawn by the State controller upon the State treasurer.

CONTRA COSTA CANAL

Mr. McCARTY. Mr. Chairman, this statement is in behalf of the East Bay Municipal Utility District of Oakland, Calif.

My name is Robert L. McCarty. I am a member of the law firm of Ely, McCarty & Duncan, with offices in the Tower Building, Washington 5, D. C. We represent the East Bay Municipal Utility District, Oakland, Calif. Mr. John McFarland, general manager of that district, had expected to be here to testify but unfortunately could not make the journey by reason of other commitments, and I have been asked to appear in his stead.

The budget feature on which we appear is at page 761 of the budget and I believe has been incorporated at page 10 of the bill as passed

by the House. It concerns the so-called Richmond conduit or aqueduct, which would bring industrial water into the Southwest Contra Costa County Water District in Richmond, Calif.

This is a water district which has been formed within the confines of the presently existing East Bay Municipal Utility District. It would therefore be a competing public agency and the construction of this particular feature, which would divert waters from the Government's Contra Costa Canal to Richmond, would find the Federal Government in competition with an existing public agency. Richmond is only 1 of the 14 cities now served by the East Bay Municipal Utility District. The district also includes a considerable unincorporated area and serves about 1 million customers. Established for over 30 years, the East Bay District has a $77 million investment without a penny of Federal assistance.

As you will note, from the bill, that proviso on which we appear——

Chairman HAYDEN. We had a similar proviso in the bill last year.

Mr. MCCARTY. Yes, sir; you did.

Chairman HAYDEN. Is there a difference in the language?

Mr. MCCARTY. It is identical. This problem has been before you now for about 5 years. Initially, I think in the budget for fiscal year 1950, the Interior Department included some $630,000 to begin construction of this particular feature. We appeared at that time in opposition.

Since, however, the studies of the project had already started, it was apparently determined by Congress that the most fruitful thing would be to continue to authorize funds to complete the investigation leading to a report, but not, however, to proceed with construction until the matter had been actually authorized by the legislative procedures of Congress.

Our point in appearing this year is to indicate to you that the report which this language concerns has been delivered to Congress and was last year, but apparently too late to be considered by you. It was sent to Congress in connection with a bill introduced by Mr. Cordon last year, which would have provided for the construction of this project.

Chairman HAYDEN. This provision reads:

> Until plans have been submitted to and approved by the Congress through its legislative and appropriation procedures.

The legislative procedure is where?

Mr. MCCARTHY. Would be in Congress.

Chairman HAYDEN. Before the Interior and Insular Affairs Committee?

Mr. MCCARTHY. I think that is correct; yes, sir.

Chairman HAYDEN. What action has that committee taken?

Mr. MCCARTHY. That committee has taken none. For the first time last year it was apparently recognized there should be actually a bill rather than simple secretarial authorization, which was the problem we were faced with before that. We are not at all certain that that continues to be the situation.

PROPOSED AMENDMENT

We have offered this year an amendment to the language that now appears before you. The text of our amendment is:

Provided, That no funds appropriated by this or any previous Act shall be used for the construction of an acqueduct or an extension of the Contra Costa Canal to the Southwest Contra Costa County Water District or city of Richmond, California; and no contract shall be negotiated by the United States or any officer thereof for the construction or financing of such aqueduct or canal unless and until the construction of the same shall have been specifically authorized by Act of Congress.

I would like to point out, Mr. Chairman, that this language, as you probably recognize, is substantially the same as has been enacted by you for the past several years. It simply recognizes that the report mentioned in the previous language has been transmitted to Congress. It omits that language and continues the prohibition against the construction or contracting without a specific authorizing act by the Congress.

Chairman HAYDEN. You think that clarifies the situation?

Mr. MCCARTY. Yes, sir, we think it provides for a clean bill.

Chairman HAYDEN. Thank you.

PREPARED STATEMENT

Your full statement will be placed in the record.

Mr. MCCARTY. Thank you very much.

(The statement referred to follows:)

STATEMENT BY ROBERT L. MCCARTY FOR THE EAST BAY MUNICIPAL UTILITY DISTRICT OF OAKLAND, CALIF.

My name is Robert L. McCarty. I am a member of the law firm of Ely, McCarty & Duncan, with offices in the Tower Building, Washington, D. C. We represent the East Bay Municipal Utility District, Oakland, Calif. Mr. John McFarland, general manager of that district, had expected to be here to testify but unfortunately could not make the journey by reason of other commitments.

We appear in connection with a proposal to divert water from the Contra Costa Canal, in the Central Valley of California, by means of the so-called Richmond conduit or aqueduct, in order to bring industrial water to the Southwest Contra Costa County Water District in Richmond, Calif. The problem is reflected in language contained at page 761 of the budget before you. That language is as follows:

"*Provided further*, That no part of this appropriation shall be available for other than the completion of field engineering, survey work, and preliminary designs of the Southwest Contra Costa County Water District System and no repayment contract shall be executed or construction begun until plans have been submitted to and approved by the Congress through its legislative and appropriation procedures, after submission of a report to the Congress by the Secretary of the Interior (1) on the cost and feasibility of said project, including the necessary distribution system and (2) on the rates required to be charged to the ultimate consumers."

I would like to give you a brief history of this item before the Congress.

We first appeared on this matter in 1951, during hearings on Interior Department appropriation requests for fiscal 1952. A field investigation of this project was being conducted at the time. The House report (p. 10) summarized the situation as follows:

"Testimony indicates that $630,000 requested for Contra Costa distribution system was to be used for initiating construction of an aqueduct to serve the Southwest Contra Costa County Water District which is within the boundaries of the East Bay Municipal Utility District on the east side of San Francisco Bay. Owing to lack of agreement between two competing public agencies the $630,000

item under reference has been deleted from the approved program. No funds in the accompanying bill, or previously appropriated, are to be available for the design or construction of works to deliver water within the boundaries of the East Bay Municipal Utility District, California."

The Senate restored the funds referred to but only to be used for other Central Valley project purposes—the prohibition against the use of the funds for this conduit was retained.

In 1952 following appearances before both House and Senate committees on fiscal 1953 appropriations, language identical with the proviso in the present budget became a part of the Interior Department Appropriation Act for fiscal 1953. The adoption of this language indicated the apparent feeling that since investigations of this project had been half completed, those investigations should be permitted to continue and report thereon made to Congress without, however, any contract being entered into or any construction actually being started.

The report contemplated was not completed at the time of hearings on appropriations for fiscal 1954 and was apparently received too late last year to warrant consideration by Congress in connection with appropriations. In any event, we appeared before you in both years and the Interior appropriations acts for fiscal years 1954 and 1955 contained language identical with that contained in the budget before you, which I have quoted.

The long awaited report came to Congress last year in connection with H. R. 3691 introduced by Mr. Condon. This bill would have authorized the construction of the conduit we oppose. A letter dated March 24, 1954, from the Interior Department to the House Interior and Insular Affairs Committee advised:

"In presenting this report to your committee, this Department recommends neither that H. R. 3691 be enacted nor that it be not enacted. Our purpose is to furnish your committee with the factual data called for by appropriation act language quoted above in order to assist it in determining the course of conduct it may wish to follow in connection with the bill. The differences in view that many exist between the East Bay Municipal Utility District and the Southwest Contra Costa County Water District will no doubt be made known to your committee by spokesmen for these two organizations."

The Director of the Bureau of the Budget, in commenting on this proposed project by letter to the Interior Department dated March 11, 1954, determined that "the overall cost to ultimate consumers for raw, untreated water (would) amount to about 9 cents per 100 cubic feet."

The Director of the Bureau of the Budget stated further:

"There is at present a water supply available for industrial, as well as domestic, purposes in the Richmond area. The East Bay Municipal Utility District, a publicly owned, nonprofit agency, has constructed major facilities for a supply of 30,080,000 cubic feet daily, of which the utility district estimates it is currently using 15,374,000 cubic feet daily. The unused supply of 14,706,000 cubic feet daily is nearly 5 times the capacity of the project system outlined above. The district officials state that this present excess capacity is fully adequate to meet the future industrial requirements of the Richmond area as well as other areas within the district. The East Bay Municipal Utility District states that in 30 years of its operation, $77 million in bonds have been voted by the people to pay for waterworks it has constructed or purchased. The utility district maintains it can furnish new industries with high-quality, treated, and filtered water through its system with adequate storage, pressure, and standby service at rates which have been decreasing more and more as the district's debt is retired. These rates, on a monthly rate schedule, as of September 1, 1953, were:

"For the 1st 3,300 cubic feet	$0.20 per 100 cubic feet
For the next 30,000 cubic feet	.18 per 100 cubic feet
For the next 300,000 cubic feet	.12 per 100 cubic feet
For all over 333,300 cubic feet	.09 per 100 cubic feet"

The Director of the Bureau of the Budget concluded that the construction of this project, as outlined by the Bureau of Reclamation, with Federal funds:

"* * * would place the Federal Government in the position of competing with an already existing local enterprise which, with the presently constructed system, is capable of providing the required water supplies at an apparently reasonable price.

"Accordingly, you are advised that while there would be no objection to the submission to the committee of your proposed noncommital report on H. R. 3691, in the light of the above comments the Bureau of the Budget would not recommend

its enactment at this time. It will be appreciated if you will furnish a copy of this letter with the report you submit to the Congress."

In sum, the surveys authorized by the language of the appropriations acts for the past 3 years have been completed. The requisite report has been submitted to Congress. The executive departments have transmitted messages to the Congress which, although based on this report, are comments on separate legislation. To reflect the foregoing, and to insure that this project will not be instituted on the basis of departmental action, as it very nearly was in 1951 when we first appeared before you, we request that the following language be inserted in lieu of the language now contained in the budget.

Provided, That

"No funds appropriated by this or any previous act shall be used for the construction of an aqueduct or extension of the Contra Costa Canal to the Southwest Contra Costa County Water District or City of Richmond, Calif.; and no contract shall be negotiated by the United States or any officer thereof for the construction or financing of such aqueduct or canal unless and until the construction of the same shall have been specifically authorized by act of Congress."

This language is substantially the same as enacted by you for the past 3 years. It merely recognizes that the report called for has been transmitted and, while omitting language as to the report, continues the prohibition against construction or contracting without a specific project authorization from Congress.

SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT

STATEMENT OF EMERSON DUNCAN, ATTORNEY AT LAW, WASHINGTON, D. C., ACCOMPANIED BY WILLIAM A. NORRIS, ATTORNEY AT LAW, WASHINGTON, D. C.

SOUTHERN SAN JOAQUIN VALLEY PROJECT, CALIFORNIA

Chairman HAYDEN. Mr. Duncan. You represent the Southern San Joaquin Municipal Utility District?

Mr. DUNCAN. Yes, sir; I will identify myself for the record.

My name is Emerson Duncan. I am an attorney with the firm of Ely, McCarty & Duncan, located in the Tower Building, Washington, D. C. We are special counsel for the Southern San Joaquin Municipal Utility District, which is located in Delano, Calif.

I am accompanied here by Mr. William A. Norris of our firm. We are appearing before you today at the request of Mr. E. L. Gleischner, the chairman of the board of directors of the district. Mr. Gleischner regrets that he is unable to be here, but he is currently engaged in harvesting his crops. He did appear with the secretary of the district before the House Appropriations Committee, and Mr. Green, the secretary of the district, at that time presented very detailed motion pictures of the condition of a portion of the distribution lines involved in this system.

We regret that we have very limited time, because I think that those moving pictures show very clearly the condition of the pipeline that we are discussing today.

PREPARED STATEMENT

The problem which we are bringing before you, Mr. Chairman, is not at the moment a request for funds, but we are reporting to you on the use of funds which you have already appropriated. In the limited time which we have available it is not possible to give this committee more than a very short statement of the present condition of the southern San Joaquin distribution system and the major problems which confront that district. I would like, with your permission, to

insert at this juncture a more detailed statement in the record together with exhibits which set forth correspondence with officials of the Department of the Interior and the Bureau of Reclamation.

Chairman HAYDEN. That may be done.

(The information referred to follows:)

STATEMENT ON BEHALF OF THE SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT PRESENTED BY C. EMERSON DUNCAN II, SPECIAL COUNSEL

Portions of units 1 and 2, consisting of 31 miles of mortar-joint pipelines of the water-distribution system of the Southern San Joaquin Municipal Utility District constructed by the Bureau of Reclamation pursuant to a repayment contract with the district dated May 13, 1948, are in a thoroughly unacceptable condition, incomplete, and not ready for satisfactory operation because of more than 300 active leaks in the 31 miles as of March 28, 1955. These leaks still exist despite the fact that more than 5,000 leaks have been patched and repaired in the 31 miles of line prior to this year.

The water escaping from the leaky pipes constitutes an intolerable condition, hazardous to the physical well-being of the people in the locality as well as to their property and the escaped water seriously interferes with farming operations in the area.

The district and its farmers are required to pay the Bureau of Reclamation in advance for water they order, which could cause considerable financial loss to the farmers if the leaky pipes prevent delivery of their water.

Responsible officials of the Department of the Interior and the Bureau of Reclamation have repeatedly acknowledged the unacceptable condition of the distribution system and have given repeated assurances that the district would not have to accept responsibility for any portion of the system until it was completed and ready for satisfactory operation. Such assurances were made by the Honorable Fred G. Aandahl, Assistant Secretary of the Interior, in a letter to Senator Knowland dated June 8, 1953, by Mr. Goodrich Lineweaver, then Acting Commissioner of Reclamation, in a letter to Senator Knowland, dated May 1, 1952, and in a letter to Congressman Engle dated May 2, 1952, and by other Bureau of Reclamation officials on other occasions.

On May 2, 1952, the Bureau of Reclamation accepted unit I from its contractor, subject only to the contractor's 3-year warranty of repair, notwithstanding the assurances by responsible Bureau officials as late as April 28, May 1 and 2, 1952, that none of the lines would be accepted from the contractor until they were free of leaks and notwithstanding that paragraph 75 (a) of specification No. 2893 provides expressly that the Government shall make final acceptance of the contractor's work only when a section of the pipeline "has been completed and is reasonably free of leaks and ready for use as determined by the contracting officer."

On April 7, 1955, the Chief Engineer of the Bureau of Reclamation made findings of fact as to the contractor's and the Bureau's respective responsibilities for the defective pipelines, in which he found, with the concurrence of the contractor:

"8. There have been many different views and opinions expressed by parties who have made investigations for the Government, the contractor, and the irrigation district, as to the causes for the unusually high number of leaks in the mortar-joint lines construction in this system. These causes include poor workmanship, adverse thermal conditions, unstable foundation conditions, unsuitable mortar governed by specifications, porous areas in the pipe shell, pipelaying in hot weather, unsatisfactory backfill, lack of proper protection of lines after laying, differential settlement and lack of end restraint. It is logical to assume that some leaks in the system could be attributable to any one or a combination of two or more of these causes. Under the guaranty provisions of paragraph 77 (b), the contractor is responsible only for leaks that were due to defects in workmanship or in materials furnished by the contractor. Leaks resulting from other causes would be the responsibility of the Government."

In a letter to the Southern San Joaquin Municipal Utility District dated April 18, 1955, W. W. Brenner, projects construction engineer of the Bureau of Reclamation at Lindsay, Calif., stated:

"The 3-year guaranty period for unit 1, lateral 119.6W and lateral 122.5W and the sublaterals expires May 2, 1955. After this date, the district will be expected to assume responsibility for repair of pipelines as provided in the January 3, 1955, letter of agreement."

Mr. Brenner so informed the district notwithstanding the repeated assurances by responsible officials of the Department of the Interior and the Bureau of Reclamation that the district would not have to accept responsibility for the system until it was reasonably free of leaks, and notwithstanding that the Bureau has not yet provided an adequate distribution system as it is required to provide by the basic repayment contract with the district of May 13, 1948.

The only permanent solution to the problem is to rip out all the unsatisfactory work and replace it with lines having rubber-gasket joints (which have been used with success on two-thirds of the southern San Joaquin distribution system).

It was suggested to the Honorable Fred G. Aandahl, Assistant Secretary of the Interior that Mr. Brenner's letter of April 18, 1955, be rescinded immediately, and that the Bureau of Reclamation continue to repair the leaks by its own arrangement with the contractor, paying for the repairs out of construction funds. We have asked that the Bureau replace the unsatisfactory work with lines having rubber-gasket joints, and to begin planning this construction as soon as possible so that the work may commence immediately after the present irrigation season.

Secretary Aandahl, by letter dated May 13, 1955, addressed to the president of the district's board of directors, declined to take action rescinding the Bureau's directive to the district to assume responsibility for repair of the defective pipelines in unit No. 1. Pending a satisfactory solution of this problem the district has repaired bad leaks numbering 13, as of June 2, and has advised the regional office of the Bureau that these repairs were accomplished under protest.

In the event that replacement of the unsatisfactory portions of the system is determined to be the only satisfactory solution, an increase of appropriations or an earmarking of funds contained in the appropriation bill now before you, with reference to the Central Valley project distribution systems item, may be necessary and we will ask your cooperation in bringing that about.

EXHIBITS ACCOMPANYING TESTIMONY OF C. EMERSON DUNCAN, ON BEHALF OF SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT

Excerpt: Testimony of R. K. Durant, construction engineer of the Bureau of Reclamation, before the meeting of the joint interim committee on water problems, California State Legislature, Delano, Calif., April 28, 1952.

Letters:

Goodrich Lineweaver, Acting Commissioner of Reclamation, to Senator William F. Knowland, May 1, 1952.

Assistant Secretary of the Interior Fred G. Aandahl, to Senator William F. Knowland, June 8, 1953.

W. W. Brenner, projects construction engineer, region 2, Bureau of Reclamation, to Southern San Joaquin Municipal Utility District, April 18, 1955.

Assistant Secretary of the Interior Fred G. Aandahl, to E. L. Gleichner, president, Southern San Joaquin Municipal Utility District, May 13, 1955.

EXCERPT FROM TESTIMONY OF R. K. DURANT, CONSTRUCTION ENGINEER OF THE BUREAU OF RECLAMATION, BEFORE THE MEETING OF THE JOINT INTERIM COMMITTEE ON WATER PROBLEMS, CALIFORNIA STATE LEGISLATURE, DELANO, CALIF., APRIL 28, 1952

As these units are completed and when the work on the lines put into operation is found to be satisfactory the system then will be turned over to the district for their use. It must be repeated, and district directors have been advised many times by the Bureau, that the distribution system will not be turned over to them until it is satisfactory.

The United States has not accepted any portion of the work performed, nor has the district at any time been requested to accept or assume responsibility for any of the work completed or put into operation. Such assurances were given by the manager of the district, by the Chief Engineer of the Bureau, at a conference in the Bureau's office in Denver, Colo., on January 16, 1952.

On November 30, 1951, Mr. Jack Rodner, district manager for the Bureau, wrote to the district:

"Mr. Boke has asked me to state most emphatically and unequivocally that until it is sufficiently established that the distribution system meets with the specifications of the construction contract, it will not be accepted from the contractor, and, further, the use of the system during the current period does not

constitute an acceptance by the United States or the district. The development period will not commence to run until the system has been completed satisfactorily."

On April 4, 1952, Mr. L. M. McClelland, Chief Engineer of the Bureau, wrote to the district manager:

"Your letter of March 26, 1952, expresses apprehension as to whether the Southern San Joaquin Municipal Utility District will receive a good, usable pipe-distribution system. The contracts under which the distribution system is being constructed provide just such a system and the Bureau intends that the requirements of these contracts will be met."

The Federal Government is constructing the Southern San Joaquin Municipal District. All factors of type, design, and layout have been continuously under discussion with the district before the repayment contract was entered and since. The district wishes have been followed.

In the interest of speed and economy the Bureau has welcomed and utilized the best obtainable advice of the concrete-pipe industry throughout the Nation in addition to the Bureau's own knowledge gained through successful design and construction of approximately 400 miles of concrete pipeline during the past 4 years.

Leaks which have developed in a portion of the system are vexatious, troublesome, and certainly unwelcome, but they involve only a relatively minor part of the work, and they are being successfully repaired.

The Bureau of Reclamation will comply in every respect with all of the terms of the repayment contract. The Bureau is fully cognizant of the responsibility imposed upon it by the Congress and that responsibility extends not only to the taxpayers and the citizens of the United States, but to the districts with which it seeks to cooperate in bringing water to the land. It proposes to exercise this responsibility with integrity, and generally that completes my statement (transcript, pp. 123–125).

DEPARTMENT OF THE INTERIOR,
BUREAU OF RECLAMATION,
Washington, D. C., May 1, 1952.

Hon. WILLIAM F. KNOWLAND,
United States Senate,
Washington, D. C.

MY DEAR SENATOR KNOWLAND: By your letter of April 15, in regard to the leakage problem on the distribution systems being constructed for the Southern San Joaquin Municipal Utility District, and your personal inquiry during the course of the appropriation hearings today, you indicated your desire to be informed regarding this matter and also receive a copy of any reply which we may have sent the district. The district brought this problem to our attention some time ago, and Chief Engineer McClellan has just returned to Denver from a conference with the district and construction contractor, United Concrete Pipe Corp. Copies of correspondence between the district, the Chief Engineer, and the regional office, have received our attention.

As you are probably aware, the situation with respect to the distribution systems in the San Joaquin Valley has been a matter of considerable concern. Mr. Green, the manager for the district, has been very alert in bringing all problems to our attention and has frequently consulted with our Chief Engineer, regional officials, and construction people. In addition, the district has secured the services of independent consulting engineers to consider the problems involved.

In the letter Mr. Green sent to Construction Engineer Durant of March 26, he took particular exception to the methods being used by the contractor to arrest the leaks in portions of the system and alleged that they amounted to fraudulent practice. Such allegations disturbs us, because Mr. Green did not object to the use of these methods at the time they were proposed.

There are now 3 contracts in force for each of the 3 units in the district. While all of the pipe in unit 1 has been in place for about a year, none of the lines have been accepted by the Government because of the unusual amount of leakage, mostly in the smaller pipe sizes where cement and mortar joints were used. The matter of responsibility for such leaks has been the subject of controversy for some time. The Government holds that the contractor is responsible for the leaks.

primarily due to faulty workmanship, whereas the contractor has alleged faulty design, poor bedding material, temperature differential, and other causes.

The Government has advised both the district and contractor that none of the lines will be accepted until a system free of leaks is provided. The contractor, Mr. Green, and members of the Chief Engineer's staff met on January 16 in Denver, Colo., at which time this question was thoroughly discussed and the Government's position was firmly established. At that time the use of organic matter in the pipe to reduce the leakage was discussed and no objections were raised. Since that time the contractor has been using organic matter in the pipeline for testing operations. Although the Chief Engineer did not believe that this method would to any great extent correct the leakage problem, he saw no reason to object to the procedure, as such method has been known to reduce or stop leakage in pipelines. At the same meeting, in the presence of Mr. Green, the contractor was advised that prior to final tests, any lines in which the organic material had been used must be thoroughly flushed out and drained. Mr. Green was also advised by the independent consulting engineers that the contractor had not fully complied with the specifications, and that the leaks were the result of faulty workmanship in the mortar-type joints. This coincides with our conclusion that it is the responsibility of the contractor to correct such deficiencies.

In view of the position of the Bureau of Reclamation, we are at a loss to understand Mr. Green's continuing concern, since none of the lines have as yet been accepted by the Government and, of course, the district has not been requested to assume any responsibility for the work performed. *All of the Bureau's contracts require that good, useable, pipe-distribution systems be furnished and it is our intention that these requirements be met before the systems are accepted and turned over to the district for its operation.*

As a result of the above-mentioned conference, we believe the concern as expressed by Mr. Green in his letter to Mr. Durant about the immediate problem and the Bureau's attitude should be allayed. We are in touch with this situation and will keep you currently advised.

Sincerely yours,

G. W. LINEWEAVER,
Acting Commissioner.

[Emphasis supplied.]

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., June 8, 1953.

Hon. WILLIAM F. KNOWLAND,
United States Senate,
Washington, D. C.

MY DEAR SENATOR KNOWLAND: I am enclosing for your information copies of letters, dated as above, addressed to Mr. Burt Green and Congressman Harlan Hagen, in regard to the difficulties being encountered in construction of the distribution system for the Southern San Joaquin Municipal Utility District. These letters have been prepared following the meeting in your office, on May 8 with you, representatives of the district, Under Secretary Tudor, and myself.

We feel that the meeting was instrumental in getting us better acquainted with the problems and the interests of the district. *While the inconvenience and apprehension of the landowners caused by the leaking conditions in the pipelines are regretted, we wish to assure you that the contractor is being required to repair these deficiencies as rapidly as possible.*

We are advising the district that it will not be asked to accept responsibility under its repayment contract with the United States for operation and maintenance of the distribution system, and notice of commencement of the development period will not be given, as provided in the contract, until the system is completed and ready for operation.

We shall be glad to respond to any further requests you may have on this matter.

Sincerely yours,

FRED G. AANDAHL,
Assistant Secretary, Water and Power.

[Emphasis added.]

DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION,
REGION 2, DISTRIBUTION SYSTEM PROJECTS OFFICE,
Lindsay, Calif., April 18, 1955.

BOARD OF DIRECTORS,
Southern San Joaquin Municipal Utility District,
Delano, Calif.

GENTLEMEN: The letter form of agreement, dated January 3, 1955, and accepted by your district on January 12, 1955, contains statements of responsibility as to cost of operation, maintenance, and repair of distribution systems, as well as relief from cost from those items of maintenance or repairs performed by the contractor in pursuance of its guaranty.

The provisions of the contractor's guaranty for the first unit of work are contained in paragraph 77 (b) of Specifications No. 2821 and are essentially as follows:

"Upon completion of the work in accordance with the contract and specifications, the Government will make final acceptance of the work * * * *Provided:* That for a period of 3 years thereafter, the contractor warrants and guarantees the untested pipeline sections against defects in workmanship or in materials furnished by the contractor * * *."

The 3-year guarantee period for unit 1, Lateral 119.6W and Lateral 122.5W and sublaterals expires May 2, 1955. After this date, the district will be expected to assume responsibility for repair of pipelines as provided in the January 3, 1955, letter of agreement.

On May 2, 1955, 9 a. m. starting at the Bureau of Reclamation office in Delano, an inspection will be made of the lines in unit 1 and it appears advisable for representatives from your district to participate.

I would appreciate knowing the number to be expected from your District so that the inspection trip can be properly coordinated.

Very truly yours,

W. W. BRENNER,
Projects Construction Engineer.

[Emphasis supplied.]

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., May 13, 1955.

Mr. E. L. GLEICHNER,
President, Board of Directors,
Southern San Joaquin Municipal Utility District,
Delano, Calif.

MY DEAR MR. GLEICHNER: This will reply to your letter of April 29, 1955, which followed the conference in my office concerning particularly the matter of operation and maintenance and repair of unit 1 of the distribution system constructed for the district. In your letter you request that the letter from Mr. Brenner, projects construction engineer for the Bureau of Reclamation, dated April 18 be vacated.

It is not in fact the letter of April 18 which brings about the responsibility of the district for operation and maintenance and repair of the completed portion of the distribution system. That responsibility was agreed upon by the acceptance on January 12, 1955, on behalf of the district, of the terms of an offer to make the system available for delivery of water, made by the Bureau of Reclamation to the district under date of January 3, 1955. Part of that agreement recognized that for periods of time then already established the construction contractor would be responsible to the United States for repairs of the system under guaranty clauses between the contractor and the United States, and in that agreement of January 12 it was also recognized that, upon termination of the contractor's responsibility, the burden of repair is that of the district. The letter of April 18 merely sets forth the fact existent at the time of the agreement that the contractor's guaranty period on unit 1 construction expired on May 2. The work having been completed therefor as set forth in that agreement, the responsibility for repair incident to operation and maintenance for the delivery of water is that of the district.

If, in connection with your operating experience and other factors pertinent for consideration, it appears that further construction by way of modification or extension or extension of facilities is to be undertaken, then it will be a matter for your district to indicate its desires and by appropriate agreement between

the district and the United States to bring such work under the repayment undertaking of the district, within the present maximum construction obligation to the extent available and perhaps beyond that if necessary.

Pending an expression of the district's views as indicated above, it appears that there is no action appropriate to alter the effect of the January 1955 agreement.

Sincerely yours,

FRED G. AANDAHL,
Assistant Secretary.

LEAKS IN DISTRIBUTION SYSTEM

Mr. DUNCAN. Thank you, Mr. Chairman.

On March 13, 1948, the district entered into a repayment contract for the construction of a distribution system to utilize the water supply made available from the Central Valley project. The system for most purposes has been completed and the district had the beneficial use of water from that system since 1951. A great number of leaks, numbering some 5,000 as of the beginning of this year, developed in about 31 miles of this system.

The system in all contains around 160 miles of pipe, so the portion of the system which we consider to be defective is a relatively small portion, about 31 miles. These leaks have created conditions which in the district's mind make operation of that portion of the system extremely difficult and in one sense a public safety factor is really involved because the leaks have flooded a number of the roads in the area making travel very hazardous.

I believe that the motion pictures indicated that school buses traveled several of these roads and the members of the district were very concerned at this particular condition. They pointed that out to the House committee.

FLOODING OF FARMLANDS

In addition to that, fields are often flooded because of the leaks and the farmers are unable to make the best use of the ground. The principal crops in that area are potatoes and vines. These are harvested at certain times of the year, and flooding interferes considerably with the harvest and also with the growing of these crops.

The 31 miles of unit No. 1 which are defective consist principally of pipe with mortar joints. Other portions of the system constructed later have been made with rubber gasket joints and it was at the insistence of the district that rubber gasket joints were utilized in place of the mortar joints on the remaining portions of the system.

The portion of the system we are discussing was completed in 1951 and proved to be defective at once. In 1952 the word was spread around that the Bureau was going to accept this line from the contractor. The people of the district immediately protested this move and on May 1, 1952, the Acting Commissioner of Reclamation assured Senator Knowland, who had inquired about the matter, I understand, in the course of an appropriation hearing, that none of the lines would be accepted until the system free of leaks was provided.

CONTRACTOR'S WARRANTY

Similar assurances were made to Congressman Engle on May 2, 1952, one day after Senator Knowland had received these assurances. Notwithstanding that, The Bureau on May 2, the very same day,

accepted the line from the contractor, subject to the contractor's 3-year warranty for repairs. That warranty expired on May 2 of this year and settlement with the contractor was made by the Bureau.

At this juncture the Bureau has insisted that the district accept the responsibility for the operation and maintenance of this system.

Chairman HAYDEN. Was the contractor penalized?

Mr. DUNCAN. The contractor, I believe, Mr. Chairman, was awarded a sum for repairing leaks which the Bureau felt did not fall within the classification of faulty construction—leaks which had appeared for other reasons. That, to my understanding, has not been made entirely clear by the Bureau.

Some 5,000 leaks had been repaired all told, but after the contractor's warranty period began, of the total number of leaks repaired—and I am not certain of the exact number repaired by the contractor—a percentage was found to be as a result of defective workmanship and he was responsible for repairing those leaks and did so.

Other leaks were found not to be the result of faulty workmanship but were given another classification, a very broad classification, and the contractor was not responsible for the cost of repairing those leaks and he was awarded a fixed sum by the Bureau for having repaired them. It is my understanding that such a sum was paid to the contractor after the settlement was made and the warranty period had expired.

Chairman HAYDEN. How much money will it take to repair the leaks?

Mr. DUNCAN. We do not have an accurate estimate, Mr. Chairman. We have asked the Bureau to furnish statistics which will show how much is available from the total appropriated. The total appropriated was around $9,900,000 and I believe about $1.7 million of that remains unexpended at this particular time and the system has been substantially completed.

Chairman HAYDEN. This matter you say was presented to the House. Did the House do anything about it?

Mr. DUNCAN. The House did not act on it, Mr. Chairman. Actually there was no action that could be taken. This was just in anticipation that further appropriations might have to be made if the Bureau can work out some acceptable solution to the problem with the District. The District is extremely concerned because they feel that they have not been give a system which is free of leaks as provided in the repayment contract.

Chairman HAYDEN. I don't blame the district, but I was just wondering what practical thing we could do about it right now.

Mr. DUNCAN. As I said, Mr. Chairman, I think this is just a factual report to you so that you will be aware of the possible need for further appropriations at a later time if that appears to be necessary. I believe it would be helpful if the committee, in its report, would note the condition of this system, and perhaps could suggest to the Bureau that the present situation should be rectified before the district is asked to undertake responsibility for operation and maintenance of the defective portion.

That is all I have, Mr. Chairman, and I thank this committee very much for hearing us.

STATEMENT OF HON. JOSEPH C. O'MAHONEY, A UNITED STATES SENATOR FROM THE STATE OF WYOMING

RECLAMATION PROJECTS IN WYOMING

Chairman HAYDEN. Senator O'Mahoney.

Senator O'MAHONEY. I wanted to say a word—I do not think it necessary to say more than a word—on behalf of the action which was taken by the House on the floor last week in restoring the budget estimates to a number of reclamation projects in the State of Wyoming. The Bureau of the Budget carefully went over the requests of the Department of the Interior for these various projects and, as I understand it, held them down.

As this committee well knows, the practice has been for the Bureau of the Budget to set a ceiling upon each of the departments, so that the departments may not in their requests go above that ceiling.

The Bureau of the Budget has been endeavoring to hold expenditures to the lowest limit and, in many instances, I think that it has held expenditures to a level lower than the construction economies would justify.

Take, for example, the case of the Glendo Dam in Wyoming, which is vivid, I think, in the minds of the committee. The contractor who was working on that dam was working so expeditiously and the work was progressing so favorably that the funds would have run out and work would have had to be suspended. However, an appeal was made to this committee and the committee of the House so that the Department of the Interior was permitted to use other funds for that purpose.

The Public Works Committee in the House, may I say, has been handling these reclamation projects for the first time. I see the Congressman from Nebraska in the room, Congressman Miller, who was chairman in the last Congress of the Committee on Interior and Insular Affairs. He offered the motion on the floor of the House by which the ill-advised action, if I may say so, of another body of the Appropriations Committee of the House cut these appropriations far below the justifiable standard, and I am asking this committee to be sure that it is not persuaded to desert the majority on the floor of the House in restoring these estimates or these appropriations by supporting the motion of the Congressman from Nebraska.

Senator HAYDEN. Thank you for your statement, sir.

STATEMENT OF HON. ROMAN L. HRUSKA, A UNITED STATES SENATOR FROM THE STATE OF NEBRASKA

FORT RANDALL-GRAND ISLAND TRANSMISSION LINE

Chairman HAYDEN. Senator Hruska.

Senator HRUSKA. My appearance here this morning, Mr. Chairman, is in connection with the request for a 230-kilovolt transmission line from the Fort Randall powerplant on the main stem of the Missouri River down to Grand Island, Nebr. With me here is my colleague, Senator Curtis, members of our Nebraska delegation, and other witnesses.

This matter has been heard before the House committee. It is not our desire to furnish cumulative evidence here and testimony, but we

do have two witnesses here who did not appear before the House committee in this connection, and we should like them to appear here in support of this request. That is Mr. C. Petrus Peterson, of Lincoln, Nebr., currently president of the National Reclamation Association, and former Governor Robert Crosby, also of Nebraska, who is desirous of appearing here.

Mr. Chairman, this is not a simple project that we are requesting which is complete in itself. It bears vitally on the long-range power policy and problems of our State and briefly it has to do with the acceptance and delivery of the powerload which will be furnished by the main stem dams on the Missouri River.

Currently there is effective, entered into in May 1954, a contract for delivery of 100,000 kilowatts of power from Fort Randall and from Gavins Point into the State of Nebraska. This map, Senator Dworshak—I think you can probably see it here—shows that to facilitate and make possible the delivery of that 100,000 kilowattts of power there is presently existing a 115-kilovolt line from Fort Randall down to O'Neill, which is some 40 miles in length and which will carry under this arrangement 30,000 of these kilowatts.

There is another 115-kilovolt line in process of construction, and it will be finished this year, from Gavins Point down to Belden. That is approximately 30 miles in length.

The total cost of those two projects is approximately $1 million. There will be not only the remaining 30,000 kilowatts of the 100,000 under firm contract now to take care of, but there will be also two other factors which will have to be taken care of in the very near future.

One is the heavy seasonally firm power, as we know it, generated in the summertime from Fort Randall by reason of the release in substantial amount of water there to keep up the level of the Missouri River. That is the second factor. The third factor which will enter the picture ultimately and in the very near future will be such additional firm power as will be available from Oahe when that is finished.

In order to implement the acceptance of those 3 items of power it will be necessary to build, in the judgment of the witnesses here, a 230-kilovolt line running from Fort Randall down to Grand Island, which is approximately 155 miles in length.

Chairman HAYDEN. It is apparently a little over halfway across the State.

Senator HRUSKA. About that, Mr. Chairman.

There is currently in the House provision for a 115-kilovolt line from Fort Randall, but that will not do the job. It won't do the job, because it won't take care of those three factors which I mentioned. As to future allocations from Oahe, we are making no presumptions in that regard. We are simply making this assumption when we come before this committee: That some of the power from Oahe will be allocated to the only State which is constituted entirely of preference customers and the only state which lies entirely within the Missouri River Basin.

Chairman HAYDEN. What is the general capacity of the transmission lines maintained by the Nebraska public power system within the State now?

Senator HRUSKA. The general capacity?

Chairman HAYDEN. Yes.

Senator HRUSKA. I would have to ask Mr. DeBoer who is here from the Nebraska public power system, Mr. Chairman. Could you answer that question, Mr. DeBoer?

Mr. DEBOER. Mr. Chairman, the existing transmission system, of course, is a system which delivers power from load centers, power plants, to the consumers, the wholesale consumers. As such it is pretty hard to set a specific capacity on it. There is probably, say, 500,000 kilowatts of capacity in it, but it is very widely spread and it does not have very much capacity from one end to the other, as you can see.

Chairman HAYDEN. Are they 115-kilovolt lines generally?

Mr. DEBOER. They are 115-kilovolt lines.

Chairman HAYDEN. If power came from a big dam over into Nebraska at 230-kilovolts it would have to be stepped down?

Mr. DEBOER. That is correct.

Senator HRUSKA. As I understand it, one of the compelling reasons for a 230-kilovolt line, Mr. Chairman, is the distance from the point of generation to the point of distribution, which will be in the area of Grand Island and north of Grand Island, and particularly, although not exclusively, for the heavy load in the summertime of that seasonally firm power which will be used for irrigation purposes. A 115-kilovolt line just won't do the job on that distance. There is too much dissipation and too much loss of energy, as I understand it, and that point will be covered by other witnesses here.

Mr. Chairman, I think this is a big factor in the situation. There is a relatively small amount of irrigation which is possible from the big stem dams on the Missouri River in South Dakota. There is one way, however, in which irrigation can be achieved and that is by making power available, and this power particularly over this 230-kilovolt line which will run down to Grand Island, for pump irrigation—Mr. Peterson is here and he has agreed to cover for the record the limit of the availability of water and its ample supply in the State of Nebraska—and that is by making that power available in this way at that time. Nebraska is the only State which has the supply of water and which is so close to the sources of generation which makes the use of that seasonally firm power practical, so that that is a heavy consideration in this picture.

Just by way of general background I might point out, Mr. Chairman, that on the basis again of comparative treatment of States—we think our neighbors are just as good as we are and we love them, but we also represent the State of Nebraska—to date insofar as transmission lines and the availability of power from the big-stem dams is concerned, there has been a total of $1 million approximately expended for transmission lines in Nebraska. We respectfully call your attention to the fact that the transmission line running from South Dakota to Granite Falls, Minn., is under process now at a gross cost and ultimate cost of about $17 million. There is presently under construction and in process a line from Fort Randall to Sioux City, Iowa, for the Iowa cooperatives and the Iowa sources of delivery, at a cost of approximately $13 million. The request here is for $9.3 million approximately, which added to the $1 million which has already been committed will make about $10 million, and while it won't be equal in terms of money, we are not concerned solely about the money; we are concerned about bringing down, as I say, some of that power into

Nebraska on a feasible basis to serve the purposes which I have outlined.

Mr. Chairman, I would like to call on my colleague in the Senate, Senator Curtis, for the purpose of making such statement as he might want at this time.

Chairman HAYDEN. We will be pleased to hear you, Senator.

STATEMENT OF HON. CARL T. CURTIS, A UNITED STATES SENATOR FROM THE STATE OF NEBRASKA

IMPORTANCE OF PROJECT

Senator CURTIS. Mr. Chairman, I shall be very brief because I do want you to hear the witnesses we have with us. I, along with the entire Nebraska delegation, all the House Members and Senator Hruska and myself, appeared before the House committee for this. I am for it. I think it ought to be done. I have been interested in this general Missouri River Basin development for a long time. It was my privilege in the House to introduce the resolution that called for the original survey. I served on the committee that wrote the plan, and I was a member of the conferees of the Flood Control Act of 1944. We need a 230-kilovolt line somewhere in Nebraska. With this ever-increasing use of electricity, it would be a mistake to close the door of the Missouri River development without a 230 line coming into Nebraska. The logical place is our load center around Grand Island. Secondly, we are coming here asking equality of treatment with the other States in the basin. They have 230 lines and, as Senator Hruska pointed out, from a dollar standpoint they have had considerable expenditure where we have had practically none.

In the third place this entire Missouri River Basin development—it is a costly project overall—was to help navigation, and to stop floods, and do some other things. But one of the important factors was irrigation, the prevention of drought and duststorms and the saving of our crops. Actually, on the main-stem dams there is going to be not very much irrigation, though some in South Dakota. When we consider this great expenditure for all of these dams on the main stem, an item of $9 million for irrigation in the Platte Valley, in the tablelands around, and other valleys there, the witnesses will show that that is ideal. They are putting wells down very rapidly. We need them. If we are going to adhere to the original purpose of the Missouri River development, we must utilize this vast expenditure to irrigate every acre that we can, because the most disastrous thing that comes to Nebraska is crop failure.

As pointed out, we need this for pump irrigation. The question arises: Is there going to be power available? We have to think in terms of the completion of the Oahe Dam. So far as Nebraska is concerned, we are ready to buy and use 100,000 kilowatts. Official statements as to how much can be relied upon, of course, have not been made, but we believe that a conservative statement of that would be 60 percent of that amount, plus of course we still need vehicles for bringing in the power that is available now.

We are firmly convinced that Nebraska ought to have a 230 line and that it ought to go to our load center, which is Grand Island. In view of the position of various depths, if the construction of this has to be spread over 2 years, that is still better than closing the doors.

PREPARED STATEMENT

That is my statement, Mr. Chairman. We appreciate your consideration of it. I would like to ask permission of the committee to file a statement in reference to the Republican River projects for the record at the appropriate place.

Chairman HAYDEN. That may be done.

(The statement referred to follows:)

REPUBLICAN RIVER BASIN ITEMS

Mr. Chairman and members of the committee, I am grateful for the opportunity to present to you certain matters important to our irrigation program in the State of Nebraska. I sincerely hope that your committee can give careful consideration to the interests of Nebraskans in an orderly and continuing development of our reclamation projects.

It is my hope that this committee will retain an appropriation of $1,500,000 for the Frenchman-Cambridge project. This is the amount that passed the House of Representatives and was approved by the Bureau of the Budget and this amount will permit initiating construction of the Meeker-Driftwood and Riverside units of the Frenchman-Cambridge project.

I earnestly request that your committee make available investigational funds for the Red Willow and Almena projects, which are a part of the Frenchman-Cambridge development. It is my hope that $75,000 can be afforded for investigating each of these projects. The Bureau of the Budget has approved the transfer of the Red Willow Dam project from Army engineers to the Bureau of Reclamation and it will become an integral and important part of the Frenchman-Cambridge development. I feel that ample justification for the Almena project arises from the fact that the Army engineers have assigned annual flood benefits to this project in the amount of $200,000. In addition, flood losses on one occasion in 1953 in the vicinity of Norton, Kans., which would come under the Almena project, amounted to $2,280,000.

Under the House version of this bill, the Bostwick division in Nebraska will receive $1,403,090, which will be spent on the Franklin Canal and laterals and on the Bostwick Floodway. I sincerely hope that this amount can be retained by your committee.

I thank this committee for your time and hope that favorable consideration can be given the foregoing items.

Senator HRUSKA. Mr. Chairman, with your permission I should like to ask Dr. Miller, Congressman Miller, of the Fourth Congressional District of Nebraska, to make a statement in this matter.

Chairman HAYDEN. We will be pleased to hear from the Congressman.

STATEMENT OF HON. A. L. MILLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

GENERAL STATEMENT

Mr. MILLER. Thank you, Mr. Chairman and gentlemen. I am really here in a dual capacity. I want to bolster what Senator O'Mahoney from Wyoming said relative to the appropriations. Over on the House side it was my amendment that restored the full amount requested by the Bureau of the Budget and the Department of the Interior. Some question has now arisen as to what the amendment actually does. In my opinion it places back into the bill all of the projects recommended by the Bureau of the Budget and the Department of Interior. That would include a 115 line from Fort Randall down to Neligh. It does not include such projects as the Trinity River, 1 or 2 projects up in the Northwest, and 3 or 4 other projects

that I think were not recommended by the Bureau of the Budget and the Department of Interior. I would be pleased to have them put back in, but the amendment that I offered increased the amount to the request that had formerly been made by the Bureau of the Budget and the Department of Interior for existing projects and some that were already under construction. The bill as reported to the House actually took out three new irrigation projects that had been approved by this committee and the Congress last year, and I hope they might go back in.

UNEXPENDED BALANCES

Chairman HAYDEN. Let me see if I get it clear. If we are to take it that the vote of the House is to be interpreted that all of the projects included within the budget were approved by the House, every one of them, and then if this committee can find that there is money available in unexpended balances to take care of some additional projects, you would like to see that done?

Mr. MILLER. I would like to see that done, yes, and I believe there is money available in the unexpended balances.

Chairman HAYDEN. My understanding is—and I may be incorrect about this—that the reason why the House did not appropriate as much money as was estimated in the budget was upon the assumption that there were unexpended balances that could be used to carry on the work on the project in the budget. That amount of those unexpended balances this committee will very definitely try to determine. In the light of that it gives us a little leeway.

Mr. MILLER. I think you should, but I hope in that determination you will not take out projects that the Congress put in last year; that they may be permitted to go forward. In connection with this line, the House committee in reporting said this about the 230 lines—this is in their report:

> The testimony received indicates that there is a question as to the need for an additional line at a future date to meet all of the power requirements of the Nebraska Public Service System. In view of this fact the committee believes that consideration should be given to the construction of a heavier line at this time instead of entering into the more expensive proposition of 115-kilovolt line now and another later.

So the committee in the House recognized the need of a 230 line. I think that, if it is the pleasure of this committee, instead of keeping the 115 line down to Neligh, it ought to be a 230 line in all events in order to meet the needs that would come out of the Oahe Dam when it is completed. The committee of the House recognized, because they have said they recognize, that a heavier line was needed. So any change in the appropriation bill, with respect to money to be replaced in the bill, would be that of a 230 line to Neligh.

I think, and I think our colleagues feel, that it is an investment in the resources of the United States. That money will be repaid to the Government with interest. We presently have about 12,000 irrigating wells in Nebraska, and with the cheap power coming down to the Grand Island area I think we expect thousands of more wells in that area to take care of the great underground source of water supply that we presently have in Nebraska, and I would plead with this committee to keep the funds in the appropriation bill; that we replace and then make additional occasion for the projects such as this one,

the Trinity River, and the other projects of the Northwest that were not recommended by the Bureau of the Budget, but which I think are worthy and should go forward. Thank you.

PREPARED STATEMENT

May I file this statement for the record?

Chairman HAYDEN. Certainly. The statement will be included in the record.

(The statement referred to follows:)

STATEMENT OF A. L. MILLER ON 230-KILOVOLT LINE

Mr. Chairman, it is my pleasure to appear before you to request an appropriation to construct a 230-kilovolt line from the Fort Randall Dam, on the Missouri River, in South Dakota, to Grand Island, Nebr.

The present appropriation bill contains an allocation of $940,000 for the construction of a 115-kilovolt line from Fort Randall to Neligh, Nebr. This provision was also in the appropriations bill originally presented to the Appropriations Committee of the House, but it was stricken before the bill was sent to the House floor. In making its report, the House Committee on Appropriations had this to say:

"The committee has specifically deleted $940,000 programed for the proposed 115-kilovolt transmission line from Fort Randall Dam to Neligh, Nebr. The testimony received indicates that there is a question as to the need for an additional line at a future date to meet all of the power requirements of the Nebraska Public Service System. In view of this fact the committee believes that consideration should be given to the construction of a heavier line at this time instead of entering into the more expensive proposition of one 115-kilovolt line now and another later."

Thus indicating the feeling of the committee that a 230-kilovolt line is necessary to meet the power needs of the State of Nebraska.

Extensive surveys of the power needs of our State have been made by representatives of the Nebraska Public Power System. At the present time, facilities owned by the NPPS are being put under heavy load. With the increasing demands put on the system by pump irrigation, power in the load center will soon be in short supply. Our farmers are rapidly developing the underground water potential, and present power facilities will not be adequate.

Power requirements in the summer are from 15 to 30 percent higher than in the winter because of the demands created by pump irrigation. There are, at the present time, more than 12,000 irrigation wells in Nebraska; more than 2,000 new wells were drilled and placed in operation last year, many of them powered by electricity. The NPPS studies show that by 1965 it will be necessary to furnish 100,000 kilowatts to supply the power for electrically driven irrigation pumps.

The 15 rural public power districts in Nebraska have gone on record requesting the 230-kilovolt transmission line, and have demonstrated that they are willing to contract for a minimum of 83,000 kilowatts by the year 1962. It is their feeling that pump irrigation, and consequently agriculture, cannot continue to grow and prosper in Nebraska unless this supply of low-cost electricity is made available for distribution to the users in their areas.

The Bureau of Reclamation has also made projected studies of the power development of the Missouri River Basin, which show that a 230-kilovolt line from Fort Randall Dam to Grand Island would be feasible, and that by 1962 it would be earning more than $1 million for the United States from revenues. This does not take into consideration the indirect revenues to the Treasury from increased income taxes and other sources that always follow with the development of an area.

It is necessary that a line be built into Nebraska to enable the Bureau of Reclamation to fulfill its May 1954 contract with the Nebraska Public Power System. This contract called for the sale and purchase of 100,000 kilowatts of firm power by November 1, 1956. A line has been constructed from Fort Randall to O'Neill, delivering 40,000 kilowatts of firm power; a second, from Gavins Point to Belden, Nebr., will be completed by November 1955 and will supply 30,000 kilowatts; a third, the proposed Fort Randall to Grand Island line, is necessary by November

1956 to supply the remaining 30,000 kilowatts. Since a line must be built, it should be large enough to meet the needs of the system it serves. The 115-kilovolt line will not do the job.

There appears to be an adequate power supply available at Fort Randall. In addition to the firm power generated there, large amounts of "dump" power are created when, during the summer, water is released from the reservoir into the channel of the Missouri River for navigation purposes. This "dump" power could be made available on the heavy transmission line during the irrigation season when demands on the Nebraska power load are greatest. With the completion of Oahe Dam in South Dakota, there should be an additional share of the 600,000 kilowatts generated by its powerplants. This power could be carried over the proposed 230-kilovolt line.

It is significant that the Bureau of Reclamation has invested approximately $50 million in high-voltage transmission lines and substations in North and South Dakota. It is currently constructing a 230-kilovolt line from Oahe Dam to Granite Falls, Minn., at a cost of $17 million, and one from Fort Randall to Sioux City, Iowa, at a cost of nearly $13 million. To date, Nebraska has participated in Missouri River Basin power projects only to the extent of the Fort Randall to O'Neill and the Gavins Point to Belden 115-kilovolt lines, which cost about $1 million. The $9,300,000 necessary for a 230-kilovolt line from Fort Randall to Grand Island would not be out of proportion to the grants to other Missouri River Basin States.

If a line is to be built, it should be built properly. It should be large enough to meet the needs of the people it serves. It has been demonstrated that the needs will soon outrun the carrying capacity of a 115-kilovolt line, and in a short time we should have to be back here asking for more money for another line. The heavier line is shown to be feasible, and the money will be paid back to the United States with interest. It is my belief that the request is reasonable.

Thank you for the privilege of appearing before you.

Chairman HAYDEN. All right, Senator Hruska.

Senator HRUSKA. We are always glad to accommodate any Members of Congress who have many other commitments. I would like next to call on Congressman Robert Harrison of the Third District of the State of Nebraska.

Chairman HAYDEN. We will be pleased to hear from you, sir.

STATEMENT OF HON. ROBERT D. HARRISON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

GENERAL STATEMENT

Mr. HARRISON. I am Bob Harrison of the Third Congressional District of the State of Nebraska. I am here in support of the 230-kilovolt line from Randall Dam to Grand Island, Nebr. The dams, Randall, Gavins Point, and Oahe, I think are the dams from which Nebraska will get the greatest amount of its energy. Nebraska is one of the States, and I think the only State that is totally within the Missouri River Basin. We have looked forward with a great deal of pleasure and thought that we would get our proportionate share of the energy when it was developed at these particular dams. The dams are now to the point where they are generating electricity and it is being sold to the respective States in that area.

In the interest of economy we are asking for this 230-kilovolt line from Randall to Grand Island. The Nebraska Public Power System has already contracted for 100,000 kilowatts of electricity to be sold to Nebraska, or they have contracted to buy it from the Federal Government. A line has been built from O'Neill to Randall, which is taking a part of this 100,000, and another is under construction at the present time from Gavins Point to Belden, Nebr., which is taking another

portion of this 100,000. It has been proposed to build another one from Randall to Neligh, Nebr.

In the interest of economy and with the thought in mind that Nebraska is going to get a greater portion of this energy from the Oahe Dam when it is completed, it would be folly to build the line from Randall to Neligh as a 115-kilovolt line; but rather build a 230-kilovolt line from Randall to Grand Island, which is the load center of the State of Nebraska. We have reason to think from commitments or suggestions that have been made—maybe they are not firm commitments—that Nebraska will get a sufficient amount of power when the Oahe Dam comes in, to justify the building of a 230-kilovolt line; and we hope that we can buy more electricity than that, but in the interest of economy we are asking that this 230-kilovolt line be built rather than building the 115 to pick up the extra amount of the 100,000 that has already been contracted for.

However, for the reason that more will be coming along in about 1960, it would be economically sound to build the 230 at this particular time. Therefore, I as a member of the delegation would like to request that that be done in this session of Congress.

Senator YOUNG. May I ask a question at this point?

Chairman HAYDEN. Certainly.

Senator YOUNG. Do you propose to build a 230 line all the way where the lower voltage, the 115-volt line, is now being proposed, exactly on the same mileage?

Mr. HARRISON. No; it is a different line, and it goes to a different load center than the 115 does.

Senator YOUNG. How long would it be? How many miles?

Mr. HARRISON. One hundred fifty miles, and the 115 line from Randall to Neligh is approximately half the distance, or 75 miles, but it does not get to the load center of Nebraska. It will take care of the 100,000 kilowatts that has been contracted for. However, because of the additional power that Nebraska has reason to think that they are going to get and are entitled to from the Oahe Dam when it comes in, we think that it would be economically sound to build the 230 down to the load center that will take the power at that particular time.

1,850 ELEVATION OF GARRISON DAM

Senator YOUNG. I think we are running into another serious problem now. Mr. Chairman, you may not be aware of this new development. We had hoped to operate the Garrison Dam at maximum capacity, so far as the generating capacity is concerned. The Congress has gone ahead and appropriated for 1,830-foot pool level operation all the way along. Now the Bureau of the Budget sent a letter to the Corps of Engineers advising them that they cannot use any of this appropriation for construction purposes beyond the 1,850-foot pool elevation. That is going to seriously cut down on the power production in North Dakota, and we will be claiming a part of the power developed in South Dakota if that goes through. Obviously when we have about four or five hundred thousand acres of land drowned out, we are going to make a strong claim for additional power. We believe we are justified.

Mr. HARRISON. It is my understanding, Senator Young, that when Oahe comes in they will generate in the neighborhood of 400,000

kilowatts of energy and that will be properly distributed as it was in the case of Randall, and that Nebraska will come in for a share which will be sufficiently large to justify this line.

Senator YOUNG. How do you know but that the Bureau of the Budget will not take the same position with respect to Oahe that it is now taking on Garrison? It is an unbelievable position that I cannot understand. Why the Bureau of the Budget wants to direct the Corps of Engineers not to do anything that would permit a pool level elevation operation above 1,850 is more than I can understand. It is going to mean less power in the valley.

Mr. HARRISON. Less power from the Garrison Dam.

Senator YOUNG. The same thing may happen to Oahe.

Chairman HAYDEN. Thank you.

Mr. HARRISON. Thank you very much.

Senator HRUSKA. We also have here, Mr. Chairman, Congressman Jackson B. Chase of the Second District, and Congressman Phil Weaver of the First District. Do you gentlemen want to evidence your interest in this by a statement?

STATEMENT OF HON. JACKSON B. CHASE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

GENERAL STATEMENT

Mr. CHASE. I appreciate the fact that the time is limited, Mr. Chairman and gentlemen of the committee, and that there are some experts here. I think that their time can be utilized much more profitably than mine. All I want to say is that I am from Omaha, Nebr., but our entire delegation from Nebraska that have studied this proposition respectfully urge that this is, in our opinion, a must. To me it would be tragic, knowing that this land down there around Grand Island is some of the richest agricultural land in the State of Nebraska, and water is so close at hand, if we could not have it.

We need more power, and I think that the 230 line (which inevitably will come sooner or later) is a bankable proposition. Appreciating the fact that we went through a drought period in 1934—I partially survived—we are a little bit worried for fear that possibly we might have a recurrence of that drought condition in the future. We in Nebraska pride ourselves in being in the "breadbasket" of the United States with a few of our adjoining States. To me it would be tragic if we cannot get that power, because some of the richest land in the State is that in that area.

That water is so close at hand and we need more power to bring it to the surface, and I can almost imagine the thirsty land saying—

Water, water everywhere and not a drop to drink.

because we need that power. We will get it sooner or later, but I think it is a must and if we can get that 230 line it will help us immensely. I think this is a bankable proposition.

Senator HRUSKA. Congressman Weaver.

STATEMENT OF HON. PHIL WEAVER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

PREPARED STATEMENT

Mr. WEAVER. Mr. Chairman, I would merely want to add my endorsement to the request for construction of this line. I want to point out to the committee that, inasmuch as this line is not within my district, there are many counties in my district which would stand to benefit because of our expanding pump irrigation program, as Senator Hruska pointed out before. Because of the limited time available for other witnesses, I would like to leave a statement to be filed with the committee.

Chairman HAYDEN. That may be done.

(The statement referred to follows:)

STATEMENT OF PHIL WEAVER, MEMBER OF CONGRESS, RE FORT RANDALL-GRAND ISLAND TRANSMISSION LINE

I am Phil Weaver, Congressman from the First District of Nebraska. I support the building of the 230-kilovolt transmission line from Fort Randall to Grand Island generally for the benefit of all Nebraska and specifically for the area within the First District. Nearly all of Phelps, Kearney, Adams, Clay, and Fillmore Counties, as well as many other counties in my district stand to benefit.

The project has been enthusiastically approved by Nebraska civic groups, power districts, and REA associations, as well as by the Nebraska Legislature. The building of this transmission line will mean more electricity and better rates for the expanding pump irrigation program, rural electrification, industrial and defense plants, and agricultural development.

Nebraska's greatest resource is her tremendous underground water supply. Our State is wholly dependent upon agriculture. Therefore, in order to stabilize the economy of the State it is essential that such an efficient method be used for irrigation. The fact that 6,000 electric consumers served by the Southern Nebraska Rural Public Power District—just one of the many power districts in Nebraska—are presently irrigators or plan to install pumps for irrigation in the near future, points up the widespread value of this project to the welfare and economy of individual citizens of Nebraska, to the State of Nebraska, and to the entire country.

Therefore, I urge this committee to approve and recommend to the Congress the appropriation of the necessary funds for the construction and completion of this transmission line.

Senator HRUSKA. Mr. Chairman, in keeping with my earlier statement we will not call on several other witnesses who are here and who appeared before the House committee. However, in Nebraska we are proud of Mr. C. Petrus Peterson, a distinguished citizen who is serving currently as president of the National Reclamation Association. He has a notable record in the State itself and has served in the State legislature there for many years. He is a distinguished and a full-time citizen. I would like to call on him at this time, Mr. Chairman, for elaboration of some aspects of this problem.

Chairman HAYDEN. We will be pleased to hear from you, Mr. Peterson.

NATIONAL RECLAMATION ASSOCIATION

STATEMENT OF C. PETRUS PETERSON, PRESIDENT

GENERAL STATEMENT

Mr. PETERSON. Thank you, Mr. Chairman and gentlemen of the committee. I cannot quite forego an opportunity to add a word as president of the National Reclamation Association on the restoration of funds by the House. It has been one of my pet projects for a long time to try to increase the funds for general investigation. I was heartsick when I found the drastic cut which had been made by the committee and delighted when I learned that it had been restored, so I want to add my commendation on that action and hope that it will be sustained here.

MISSOURI BASIN PROJECT

Going to the specific project that we have under consideration, the entire Missouri Basin project is unique in many ways among the basin projects over the country. It is unique in that the water supply is deemed adequate not only to supply all the water for consumptive beneficial uses, but also to maintain a 9-foot channel in the Missouri River below Sioux City.

That tremendous volume of water that passes over the turbines in order to maintain that channel will produce when these structures are completed a tremendous volume of electric energy, and the plans which were originally designed for the marketing of that power have been given very serious consideration from the beginning, and I think they have had sound engineering study. That original design was to bring this power to load centers in the five States in the region, the Dakotas, Minnesota, Iowa, and Nebraska. All of the original maps and plans showed designs including a 230 line from Fort Randall to Grand Island; I think originally to Columbus in place of Grand Island. Our people have counted on that general distribution and are looking forward to the time when maximum use can be made of that electric energy.

It happens, Mr. Chairman and gentlemen of the committee, that when allocation is made of what is called firm power, it of necessity is limited to power which can be supplied throughout the year. But everybody knows that in the operation of this total plan there is a heavier run of water over the turbines in that part of the year when water is released in order to maintain this 9-foot channel, which is in the summer months.

It happens that the peak load for pump irrigation coincides with that peak period of production of electric energy. One of the confusing things, as I have observed of this development, is the confusion of the allocation of firm power and the use of this pump irrigation power, let me call it, because that is what I have in mind.

ADEQUACY OF NELIGH LINE

This 115-kilovolt stub line coming to Neligh, under the legislation proposed, will be barely adequate to carry the contracted firm power to Neligh.

Chairman HAYDEN. That is the power contracted the year around?

Mr. PETERSON. That is right, which is another way of saying that we will not get the beneficial use even now before Oahe comes in of

the summer run of power. Everybody recognizes that this summer power has to be sold or marketed somewhere. It will either be marketed as dump power, substitution for fuel cost somewhere else, or it will be put to this, what I call higher beneficial use of pump irrigation; but it is not only that. From the standpoint of the Government itself, our best information is that the dump power sale, if that is the route taken, will bring to the Federal Treasury a reduction of somewhere between 50 percent and 33 percent lower than this pump power which is available if we get a line to carry it.

In other words, the marketing, from the standpoint of the Federal Government and sound economy, requires that there be an avenue to carry that power, summer power, to this area which can use it for this highly valuable economic use.

SUBSURFACE SUPPLY OF WATER

Nature has been very kind to our area in leaving us perhaps the greatest subsurface supply of water anywhere in this country, and I know of no one in the world where there is superior volume and availability.

Chairman HAYDEN. How well do you know that? We have been fooled in other places thinking we had a lot of water underground and then found we were pumping out the old geological water that was put in there a million years ago, and then we go dry.

Mr. PETERSON. I recognize that, and I am sure that it is in your mind from the experiences that you had in your area.

Senator DWORSHAK. How much is proposed to bring under cultivation in this area?

Mr. PETERSON. Not under cultivation in the sense of going from raw land to productive land.

Senator DWORSHAK. That is now being farmed as dry land.

Mr. PETERSON. I do not know how to describe the limits in acres. We already have something above 11,000 irrigational wells and they are going down at a very tremendous rate. You asked the question: Is there a dependable water supply adequate? The ground water studies in our State, I think, are more complete than anywhere in the country. We happen to have had for 40 or 50 years a Dr. Condra who pioneered in that work. He, together with the Geologic Survey of the United States, has crisscrossed the State and have mapped this subsurface supply in very fine fashion.

To tell you in a picturesque sort of way their conclusion, they say that the volume of water underground in Nebraska within reach of pumps, if it could all be brought up to the surface, would cover the State 20 feet deep. That is an almost unbelievable amount of water. The present Rocky Mountains, the scientists tell us, is the third set of rocky mountains. There have been two sets that have been eroded and they were spread, the granite and sand were spread, over the sloping plain that we now call Nebraska. These aquifers, the water-bearing layers, 2 of them—1 from each of the mountain ranges that were eroded—are from 75 to 300 feet deep.

The sandhill region which lies in the northwest part of our State, the high point of our State, lies there as a sponge. You never have floods in the sandhills. We had a 6-inch rainfall on the Dismal River a while back, 6 inches in 2 hours, and the Dismal River rose 6 inches. This water falling on the sandhills is absorbed and goes down to these aquifers and are not like our high plains in Texas.

PUMP IRRIGATION

We are not pumping out of a tub; we are pumping out of this aquifer which is being sustained. We will not use, in my judgment, all of the available water; at least not in our lifetime. However, the question is: How shall we get this job done? The Bureau of Reclamation had a very elaborate plan for gravity irrigation in the Lower Platte River Valley. I do not remember the number of millions of dollars that that was to cost, but it was a very large sum. In my judgment that is not going to be built because we find this pump irrigation so much more adaptable to our situation.

Chairman HAYDEN. Is the pump water used for surface irrigation, or is that done by spraying?

Mr. PETERSON. Both. If it is rolling land, I mean uneven land—it is sprinkler irrigation. On some of it the farmer lays out his plan for surface irrigation.

DEPTH OF WATER TABLE

Senator THYE. What is the depth of your water table?

Mr. PETERSON. It varies from 8 to 10 feet in the Platte Valley, and we are pumping successfully as high as 300 feet at Alliance. The reason we can do that is we are not pumping all the water that a crop needs in a year. Nature supplies the big bulk of the water for our growing season, but we always have that 2 weeks, 3 weeks, or a month—the critical period in the summer.

AVERAGE RAINFALL

Senator THYE. What is your rainfall in that particular area?

Mr. PETERSON. When you say "that particular area," if we use this area that we call the load center where the pump irrigation is, is the most concentrated, it is about 22 inches, 24 to 26.

Senator THYE. It will only be a dry spell maybe that you will have to pull on your water?

Mr. PETERSON. That is right, so we can afford to spend money for that short season. It is like the supplemental water supplies that we speak of in other parts of the West, except that we supplement nature's rainfall with this relatively small percentage of water that is needed.

To get down to this 115-kilovolt line, I always have a lot of trouble trying to understand scientific language, when they speak about kilovolts and line losses and that sort of thing, but I find there is a real similarity between the transmission of electricity and water in a pipe. A 2-inch pipe will carry 4 times the amount of water that a 1-inch pipe carries. A 230-kilovolt line will carry 4 times the amount of current that a 115 line carries. Just as if you had four 1-inch pipes and tried to carry the water a long distance, at the outer end of those pipes you would have a trickle. In the same way, when you try to transport electricity a long way in the low-voltage line you lose the energy en route.

So the suggestion of two 115-kilovolt lines is a suggestion of two 1-inch pipes, and the distance to be carried is so great that it becomes economically unfeasible because of the line losses. I think all engineers will agree that that is so, so in order to do the marketing job, from the standpoint of the Federal Government and to devote the electric energy to its highest potential use in the economy of the Nation, it

seems perfectly clear that we ought not to put a plug in up here with a stub line at 115 on the assumption that there will be no further energy.

I recognize this problem of a future allocation. We are not now trying to allocate, Senator. That has to become a problem for the folks when the time comes. I am putting my emphasis at the bottom, not on that future allocation, although I am sure that when Oahe comes in there will be some portion of that power allocated to Nebraska. I do not know how much, but there will be some, and by whatever amount will be allocated the 115-line will be inadequate; and by whatever amount of this summer power that is available and can be used, the 115 kilovolt line now is inadequate. There is a market immediately in our area for this summer power.

Senator THYE. May I ask this question: If in the event you did put in the larger capacity line and you did not have sufficient current to use the line to its maximum capacity, would you have an investment there which was not a necessary investment? You may not have the current to fill the 230.

Mr. PETERSON. The question you ask is: Will this pump power plus whatever we get from Oahe be sufficient to amortize out——

INVESTMENT IN TRANSMISSION LINE

Senator THYE. No. No. The question is primarily this: If you put in a 230 and you do not have current to use the maximum of that line capacity, would there be an unnecessary investment in the transmission line, because the question that just comes to my mind is that there is about $9 million difference, is there not, in what is now involved in the 115 and the 230, and that is a sizable difference in investment. If you cannot get enough current coming out of the hydroelectric system to make full use of the 230, are you putting an investment in there in which you are going to suffer depreciation and deterioration, et cetera, and where you are not actually going to be wheeling the current to the maximum capacity of the line?

I think we are faced with that question because, you see, there are other States that are also anticipating having some of this current from the Missouri development. I am just wondering now whether we are faced with a question that your 230 is going to demand too great a pull off of the electricity that is being generated, or whether you would ever need that larger line for what would be permissible to that area of the Nation.

Mr. PETERSON. Of course, I ought to defer on that subject to people like Mr. DeBoer who is here and who has those studies. I am not an engineer. I can say this much: There is a demand for enough power in the area.

Senator THYE. We could offer the same demand without even batting an eye, as the old boy said.

Mr. PETERSON. How this allocation will be made, of course I cannot answer that; but in any study that seems to me to be appropriate, we should certainly take care of marketing to best advantage of whatever power is generated. If you are going to use this surplus power, this summer power, you can probably sell it at Minneapolis for a couple of mills—substitute for fuel—but that is not a good way to use it.

Well, I think I have taken as much time of the committee as I probably ought to take, if you will let this technical question be taken up by those who can speak with authority. I would like to make this last comment: I have seen the western developments and struggles for development now for quite a few years. I know of no project to do this thing we call stabilizing by irrigation where the farmers are willing to bear as large a portion of the cost, sinking their own wells, and putting in their own engines. All they ask is that there shall be electric current available.

I know of no project where there is so little asked from the hands of government—and that is not a grant, but a reimbursable item—as in this case. I know of no place where so much land can be beneficially helped for so little cost with so large a percentage borne by the farmers themselves. That commends itself very highly to me.

Thank you very much.

Chairman HAYDEN. Thank you very much for your statement.

Senator HRUSKA. Former Governor Robert Crosby of the State of Nebraska is the other witness who did not appear in the House. Following his statement I should like to call on Mr. DeBoer to treat particularly the question raised by the Senator from Minnesota.

STATEMENT OF HON. ROBERT B. CROSBY, FORMER GOVERNOR, STATE OF NEBRASKA

PREPARED STATEMENT

Mr. CROSBY. Mr. Chairman and gentlemen of the committee, I think that I can say what I have to say in brief time. I have a statement that I can file with the committee.

Chairman HAYDEN. That will be done.

(The statement referred to follows:)

STATEMENT OF ROBERT B. CROSBY FORMER GOVERNOR OF NEBRASKA

Mr. Chairman and members of the committee, any recent Governor of Nebraska is sharply aware of two critical problems in his State: (1) The shortage of electric power, (2) the urgent need for irrigation.

The solution of these two problems would be admirably served by carrying out the original plan for a 230 kilovolt transmission line from Fort Randall to Grand Island.

Such a transmission line was anticipated when Fort Randall power plant was built.

For reasons not clear to Nebraskans it is now proposed to build a short stub of a transmission line from Fort Randall to Neligh with only 115 kilovolt capacity.

Faced with the inadequacy of the proposed stub line, the House Committee on Public Works appropriation bill made a report less than 2 weeks ago. The consequences of this report, if its recommendation were to be adopted by the Congress, would be little short of tragic for Nebraska.

The House committee recognized that the stub line would not be adequate "to meet all of the power requirements of the Nebraska public service system."

In view of this, the House committee says that it "believes that consideration should be given to the construction of a heavier line at this time instead of entering into the more expensive proposition of 115 kilovolt line now and another later."

However, as a disastrous non sequitur, the House committee specifically deletes any provision for any transmission line whatever leading from Fort Randall into Nebraska.

The immediate result of such a deletion is that Nebraska would be unable to receive the final 30,000 kilowatts of electric energy which the Bureau of Reclamation has contracted to deliver to the Nebraska Public Power System by November 1, 1956. This would probably mean brownouts in Nebraska in 1957. Nebraska

has been depending upon the Bureau to fulfill this contractual commitment, but the Bureau would be prevented from doing so under the report of the House committee.

Of course, the House committee does recognize the ultimate necessity of the large transmission line from Fort Randall to Grand Island.

Perhaps the members of this committee wonder about the connection between electric power delivered to Grand Island and the urgent need for irrigation that I mentioned earlier.

The picture, not a very pretty one, is briefly this:

Central Nebraska has always been the victim periodically of droughts. During the years when I was governor there was severe economic distress in many parts of south-central and west-central Nebraska. There were duststorms and total crop losses. Already this year there have been severe drought conditions in parts of north-central Nebraska.

Grand Island is almost at the center of the drought area I have described, and it has the subtransmission facilities needed in order to get the electric energy to the rural districts for pump irrigation.

Pump irrigation seems to be the answer to Nebraska's irrigation needs. Perhaps our greatest natural resource is the underground water. It is said that Nebraska has the largest and most dependable supply of subsurface water in the world.

At the present time there are more than 11,000 irrigation wells in our State, and thousands more will be installed if electric power at reasonable rates can be obtained.

Thus Nebraska has a firm seasonal demand for large quantities of electric energy. There is a happy coincidence between the time of this irrigation demand for electric energy, and the time when the Missouri River Basin projects will have large amounts of extra power. It is estimated that the Bureau of Reclamation will have available more than 200,000 kilowatts of seasonable secondary power during the heavy river runoff, from June through August of each year. That is exactly the time when pump irrigaters in Nebraska need the electric power.

One can hardly imagine a better use for the seasonal surplus power from the Missouri Basin projects. The electric energy will be translated into irrigation water, thus saving thousands of acres of crops and thus making a substantial contribution to the total welfare of the Nation. This was the original plan of those who designed the Fort Randall installation.

By a relatively small expenditure of money Nebraska can be helped immeasurably. We respectfully plead with this committee to allow the appropriation for a 230 kilovolt transmission line from Fort Randall to Grand Island.

Respectfully submitted.

ROBERT B. CROSBY,
Former Governor of Nebraska.

230-KILOVOLT LINE TO GRAND ISLAND

Mr. CROSBY. I want to reemphasize what has been mentioned, that the original planning contemplated a 230-kilovolt line to Grand Island. As a matter of fact, unless it has been changed recently, there is still a plate in the control portion of the Fort Randall powerplant showing a 230-kilovolt connection. We shall have to have another transmission line in Nebraska in order to be able to take the amount of power now contracted from the Bureau for delivery in the fall of next year. Then, of course, this line would almost immediately be put to capacity use in connection with the pump irrigation demand.

It is dramatic, the fact that during the heavy runoff period on the Missouri Basin projects, when a great amount of power will be available, and in most electrical energy systems it would be just dump power, and it will be dump power here unless it can be translated into irrigation water in Nebraska, but that period from June through August when this big surplus of power will be available on the Missouri River project just coincides with the period in Nebraska when we have to have supplemental water, and it seems to us that it is a tremendously fine way to use what would be dump power. It will not be dump

power, however, if we use it this way. It will be sort of a seasonal firm power. The Government will get a much better rate for it.

Senator YOUNG. About how much would you need for that part which you would use for irrigation?

Mr. CROSBY. We are not ready to define a limit yet, because the wells are going down, oh, at 1,500 a year. What the limit is going to be we hardly know, but it will take large amounts of power, and it will vary from year to year. In the dry year, of course, a greater amount of power will be needed. Then the third thing that was mentioned, and I will defer to someone else, is the necessity of having a line to take power from Oahe when it comes in.

All of the studies show that Oahe when it does come in will introduce in excess of 500,000 kilowatts of additional firm power, and Nebraska will need some line to carry that in as well as taking care of this irrigation need.

Thank you very much, gentlemen. If you have no questions, I will step aside.

Chairman HAYDEN. Thank you.

Senator HRUSKA. Mr. Chairman, Mr. DeBoer, executive director of the Nebraska Public Power System.

Mr. DeBoer, may we ask you to confine yourself to the two questions raised by the Senators from Minnesota and from North Dakota on those particular points, please.

NEBRASKA PUBLIC POWER SYSTEM

STATEMENT OF D. J. DeBOER, EXECUTIVE DIRECTOR

PREPARED STATEMENT

Mr. DEBOER. Mr. Chairman and gentlemen of the committee, my name is D. J. DeBoer. I am executive director of the Nebraska Public Power System. I have a statement here, and I have copies here. I would like permission to file it, Mr. Chairman.

Chairman HAYDEN. That will be included in the record.

(The statement referred to follows:)

FORT RANDALL-GRAND ISLAND 230 KILOVOLT TRANSMISSION LINE—STATEMENT OF D. J. DEBOER

My name is D. J. DeBoer. I am executive director of the Nebraska Public Power System with headquarters at Columbus, Nebr. The Nebraska Public Power System is composed of two of the original hydroelectric power districts organized under the laws of the State of Nebraska in the early 1930's, namely, the Loup River Public Power District of Columbus, Nebr., and the Platte Valley Public Power and Irrigation District of North Platte, Nebr. These districts have constructed, own, lease, and operate jointly several hydroelectric and steam electric generating plants and a vast network of high-voltage transmission lines which facilities constitute the major source of power supply in the eastern two-thirds of the State (exclusive of the city of Omaha and vicinity). The Nebraska Public Power System supplies wholesale power to 27 rural public power districts, many of which are extensively engaged in pump irrigation programs, to 8 municipalities and to the Consumers Public Power District for general distribution to 350 cities and towns and rural areas at wholesale and retail. The Platte district also supplies water for gravity irrigation purposes.

We appear before your committee today in support of a request previously filed with the Bureau of Reclamation for a 230 kilovolt transmission line from the Fort Randall powerplant on the main stem of the Missouri River in South Dakota to Grand Island, Nebr. No doubt your committee is already familiar with this

proposal. Last month we were privileged to present our case for this line before a Public Works Subcommittee panel of the House Appropriations Committee.

In May 1954 the Nebraska Public Power System entered into a 35-year interconnection contract with the Bureau of Reclamation, which contract, among other things, provides for the sale and distribution of Missouri River Basin project power and energy in the eastern two-thirds of the State of Nebraska (the area served by Nebraska Public Power System). The contract provides for delivery and purchase of not less than 100,000 kilowatts of firm power by November 1, 1956, together with unspecified amounts of secondary and dump energy as available. The contract further provides that the system will wheel power to other customers of the United States in this area.

The first 40,000-kilowatt block of firm power became available in the latter part of 1954 and is currently being delivered over a 115-kilovolt transmission line, about 60 miles long, owned and operated by the Bureau, from Fort Randall power plant to O'Neill, Nebr. A second block of firm power to a total of 70,000 kilowatts is scheduled for delivery by November 1, 1955, and this will be delivered over a 35-mile 115-kilovolt transmission line currently being constructed by the Bureau from the Gavins Point powerplant near Yankton, S. Dak., to Belden Nebr.

A final 30,000-kilowatt block of firm power, making a total of 100,000 kilowatts, is scheduled for delivery by November 1, 1956. A third transmission line is required to deliver the full contract commitment of 100,000 kilowatts on a firm basis.

It is proposed that this third transmission line be built by the Bureau of Reclamation at 230 kilovolts from Fort Randall powerplant to Grand Island, Nebr., which proposal is generally in accord with the discussions and understanding reached by the parties during the negotiations leading up to signing of the above-mentioned power contract. The proposed transmission line is about 160 miles long and would cost, complete with substation facilities having a capacity of 150,000 kilovolt-amperes, an estimated $9,300,000.

The functions of the proposed 230-kilovolt transmission line would be threefold:

1. To provide facilities for delivery of the final block of 30,000-kilowatt firm power now committed under the interconnection contract.

2. To provide facilities for delivery of large quantities of "seasonal firm" hydro power for pump irrigation purposes in central and eastern Nebraska, and

3. To provide facilities for delivery of additional amounts of firm power which will become available for sale upon completion of the Oahe Dam and powerplant, currently under construction as part of the overall Missouri Basin project.

We have already referred to the need for additional transmission line facilities to deliver the final block of firm power now under contract; therefore, further discussion need not be undertaken here.

With respect to No. 2 above, we respectfully direct your attention to the fact that Nebraska's most important natural resource is its abundant ground-water supply. This water is readily available to supplement the generally inadequate rainfall by pumping from wells. At present there are more than 11,000 irrigation wells in the State of Nebraska and many more are contemplated. In recent years the advent of the sprinkler type of irrigation equipment has opened up a large new area for irrigation of rolling land. New wells are being put down at an ever-increasing rate. Competent authority has determined that the ground-water supply is adequate for vastly increased future development. The farmers and irrigators are willing and able to install the wells and other necessary facilities for utilizing this ground water for the production of agricultural products. The only thing they ask is an adequate supply of low-cost electric power for pumping purposes. This power is available from the Missouri River Basin project at a reasonable price if delivered in the vicinity of Grand Island, Nebr., which is the natural load center for pump irrigation and from which point five high-voltage transmission lines radiate to cover the area.

The characteristics of the Missouri River Basin project are such that there will be large quantities of so-called seasonal firm power available during the summer months, which period of availability coincides with pump irrigation requirements. This seasonal firm power is not available during the remainder of the year and, therefore, can only be sold at dump rates to the extent that there is a market for it, or be permitted to go to waste.

The benefits to be derived, therefore, are twofold, namely,

(*a*) Conservation and utilization of Nebraska's abundant water resources through the availability of abundant electric power at reasonable cost for pump irrigation, and

(*b*) Providing a substantial market for large quantities of seasonal firm power which would otherwise go to waste or could only be sold at dump rates in limited amounts, thereby helping to repay the cost of the Missouri River Basin project.

With reference to No. 3 above, the proposed 230-kilovolt transmission line will tap a market for an additional block of firm power which will become available when the Oahe power development is ready for initial operation in the early 1960's.

The question has been raised as to the amount of additional firm power that may be available for Nebraska with further development of the Missouri Basin project plants. The Missouri Basin Interagency Committee report on Power Requirements and Supply—Missouri River Basin, dated May 1953 contains a most comprehensive analysis of this subject. Bureau of Reclamation estimates as incorporated in this report (appendix E) show the following amounts of power allocated to Nebraska for the area served by Nebraska Public Power System for the years indicated:

Year	Kilowatts	Year	Kilowatts
1954	46,000	1960	210,000
1955	77,000	1965	312,000
1956	107,000	1970	324,000

It is recognized that the above are estimates and cannot be considered as firm commitments, but they do without question support the contention that additional power in large quantities is scheduled for delivery in Nebraska. The report further points out that the contemplated disposition of Federal (Missouri Basin) power assumes availability of high-capacity transmission lines as spelled out in the following quotation: "Large capacity interconnections with other major power systems in the marketing area will be required to market the Federal power output and will permit integration of hydroelectric output with the fuel-burning generating capacity in such systems, so that the large amounts of secondary energy which will be available can be used effectively to save fuel, and fuel-burning plants can be used to supply the energy deficiencies of the Federal hydro system in adverse water years, and permit maximum power output of the combined Federal and non-Federal generating facilities."

The Committee on Appropriations for the House of Representatives in its report on the fiscal 1956 budget has deleted funds recommended by the Department of the Interior for the construction of a 115-kilovolt transmission line from the Fort Randall powerplant to Neligh, Nebr. The committee recognizes that such lower voltage line is inadequate to meet the long-range requirement for delivery of Missouri Basin power to Nebraska and believes that consideration should be given to the construction of a heavier line at this time. We concur in this belief. The Government will need the Nebraska market to dispose of the additional power at advantageous rates.

The construction of the proposed 230-kilovolt transmission line will result in immediate and direct benefits as well as provide for the long-range development of the Missouri River Basin and the area in general as envisioned by the Pick-Sloan plan.

In the interest of brevity we have refrained from including figures and statistics in this statement. In lieu thereof we hand you herewith for your further consideration a complete brochure covering the proposed 230-kilovolt transmission line and all statistical data incident thereto.

The fiscal 1956 budget does not include the funds necessary to enable the Federal Government to meet its present commitment for delivery of power to Nebraska. In order that we may avoid a possible critical power shortage in Nebraska in 1956 and 1957 while at the same time Missouri Basin power resources remain unused, we respectfully solicit your committee's favorable consideration of our request for inclusion of $9,300,000 in the fiscal 1956 budget for construction of the 230-kilovolt Fort Randall-Grand Island transmission line by the Bureau of Reclamation.

TOTAL IRRIGATION POWER NEEDED

Mr. DEBOER. I will try to cover the questions that have been asked here, but I believe have not been completely covered. First, Senator Young just asked about the amount of irrigation power that we think we could use.

Senator YOUNG. I think that is the best case that you can make for this higher voltage line.

Mr. DEBOER. I have here, and I am not going to bore you with it, a sheaf of telegrams from rural electric project people in Nebraska who have signified their intention to contract for 83,000 kilowatts of this type of irrigation pumping power by 1962, which is the time when the Oahe power would become available. In the meantime they will contract tomorrow for 30,000 kilowatts and continue to increase it as time goes on.

While I am on that subject I just want to show you a sheaf of resolutions here from various organizations and people in Nebraska to signify their support of this line. Mr. Chairman, as far as I know there is no opposition in Nebraska to this project. I might just mention the photographs which show the name plate on the switchboard at Fort Randall showing that there is intended to be a 230-kilovolt line to Grand Island. The Army engineers have provided for it.

POWER AVAILABLE TO NEBRASKA

The question I believe which was the other point is the use that is to be made of this 230-kilovolt line or, shall we put it this way: The amount of power that is going to be available to Nebraska from the Missouri River Basin. I would like to just take a minute or two to refer you to this document, Power Requirements and Supply—Missouri River Region, prepared by the subcommittee on electric power, Missouri Basin Interagency Committee, May 1953. I am sure you are all familiar with that committee.

You will find in that report statements based on information supplied by the Bureau of Reclamation to this committee, showing by 1970 what is contemplated. We must recognize this is not a commitment on the part of the Bureau. It is their estimate, made in 1953, of the power that will be allocated to various States in the basin. The report shows the South Dakota allocation as 325,000 kilowatts; North Dakota, 400,000 kilowatts; Minnesota, 160,000 kilowatts; and Nebraska, 500,000 kilowatts. This is by 1970. Presumably by that time the basin will be fully developed.

We now have, of course, a commitment for 100,000 kilowatts. We are very confident, Senator, that Nebraska, being an all public power State, all preference customers, will be entitled to and will receive its fair share of the additional power that is to be developed when Oahe comes in. Incidentally, under the plans the Oahe powerplant when completed will increase the total production of the basin by 500,000 kilowatts. Although the plant itself is not that large, it provides water utilization facilities which permit the other plants to produce more power.

USE OF 230-KILOVOLT LINE TO CAPACITY

Chairman HAYDEN. What Senator Thye wants to know and I would like to have answered is, if we immediately build a 230-kilovolt line into Nebraska, will that line be used to capacity at the start?

Mr. DE BOER. It will not be used to capacity until we get fifty or sixty thousand kilowatts more power from the Oahe development. We will use it, first, for 30,000 kilowatts, which is now committed, and somewhere from thirty to eighty-three thousand kilowatts of pumping power during the summer. The full capacity of the line will be 150,000 kilowatts. We will need from Oahe something in the order of another 80,000 kilowatts.

Chairman HAYDEN. If you build two 115 lines, what would the cost of the two compared to the one 230 be?

Mr. DE BOER. Very roughly, the two 115 kilovolt lines with substation facilities, let's say, $3 million; the 230-kilovolt line with substation facilities, $9 million in round figures. The 230-kilovolt line, however, will carry 4 times the power of one 115, or twice the power of two 115's; and not only that, it will carry it twice as far with losses which are within an economical range of the utilization.

Chairman HAYDEN. Then in view of the fact that you anticipate an additional supply of power to be placed on the line when Oahe is completed, you consider it a sound investment now at this time to make it a 230 line?

Mr. DE BOER. Yes, I do. As a matter of fact, in the brochure which has just been handed to you, you will find a feasibility analysis which shows that this line, if we can get the power from Oahe that I am talking about, will net financially about $600,000 a year. I mean that will be the surplus over and above operating an amortization costs available for renewals, replacements, and storms and things of that kind.

PUMP POWER RATES

Senator Thye. What do you anticipate the rate will be on pump power?

Mr. DE BOER. Four mills delivered to the load center.

Senator THYE. What will it be on your firm power?

Mr. DE BOER. We are buying firm power now on the Fort Peck rate, and that comes to about five and a half mills at 50 percent load factor.

Senator THYE. Will you have any revenues or earnings, particularly to retire your investment on, by pump power—the rates that you will collect on pump power?

Mr. DE BOER. Yes, As I said a minute ago, based on buying a block of firm power plus this 83,000 kilowatts of pump power, the line will be amortized and will be properly operated and will still have an annual surplus of $600,000. Does that answer your question, Senator?

Senator THYE. It does, excepting that I may as a Minnesotan ask why would Nebraska be considered around four to five hundred thousand kilowatts as against Minnesota with 160?

Mr. DE BOER. The figures I am quoting were established by the Bureau of Reclamation. On what basis, of course, I do not know now.

Senator THYE. That is just what I cannot understand.

NEBRASKA ALL-PREFERENCE STATE

Mr. DE BOER. I would like to say this: that by law—and certainly you gentlemen are much more competent to talk about this than I am —Nebraska is an all-preference State, all public power. I think we have probably a higher proportionate amount of load in Nebraska; that is, preference load, than Minnesota does, or South Dakota and North Dakota, for that matter, either one. However, the point I would like to make is that even though these figures show that Nebraska is to get 500,000 kilowatts, we now have 100,000, and let us assume that we get shortchanged to where we only get one more hundred thousand kilowatts, we still need this line. As a matter of fact, we cannot get the power in unless we have the line, and the additional hundred thousand kilowatts will adequately amortize this line; and it is purely plain good business, too, for the Government to build this 230-kilovolt line to Grand Island now rather than to spend money which in effect will be wasted.

GROUND WATER SUPPLY

May I say just one more thing with respect to this ground-water supply. One of the committee members raised that question. The authorities in Nebraska have found that there is an 8 million acre-foot increment to ground-water supply in Nebraska every year. We are currently using 5 million acre-feet of that water for all purposes—irrigation, domestic; every use—industrial—leaving 5 million acre-feet of surplus per year. If we say that we are conservatively going to pump another two and a half million, or half of that, that gives you two and one-half feet of water on a million acres of land per year and we still haven't used up the annual accrual.

Chairman HAYDEN. We thank you for your statement.

Dr. DEBOER. Thank you very much for your time.

PREPARED STATEMENTS

Senator HRUSKA. Mr. Chairman, I have a list of witnesses who have statements, if I may file them.

Chairman HAYDEN. They will all go in the record.

Senator HRUSKA. The list has been furnished the reporter. Thank you very much for your courtesy and your patience.

(The statements referred to follow:)

ROSTER OF APPEARANCES BEFORE PUBLIC WORKS SUBCOMMITTEE, JUNE 21, 1955

1. Member of Nebraska congressional delegation.
2. D. J. DeBoer, Columbus, Nebr., Executive director, Nebraska Public Power System, will read a statement and present other data.
3. R. L. Schacht, Columbus, Nebr., general manager, Consumers Public Power District, will make a statement.
4. C. Petrus Peterson, Lincoln, Nebr., lawyer, former State senator, now president of the National Reclamation Association, will make a statement.
5. Robert C. Crosby, Lincoln, Nebr., lawyer, and former Governor of Nebraska, representing a number of rural power districts. Mr. Crosby will make a statement.
6. Ernest Sjogren, Funk, Nebr., former president of the Southern Nebraska Rural Public Power District, State director of the National Rural Electric Cooperative Association and past president of the Nebraska Rural Electric Association. Mr. Sjogren has a statement for the record.

7. Ray Lowery, Nelson, Nebr., farmer, director and secretary of the South Central Membership Association, president of the Nebraska Rural Electric Association, and State director, third district, Nebraska Farmers Union.

8. Lawrence Brock, Wakefield, Nebr, farmer, president of Northeast Rural Public Power District, past vice president of Nebraska Rural Electric Association, Democratic State chairman, Nebraska. Mr. Brock has a statement for the record.

9. Fred Wallace, Gibbon, Nebr., farmer, director, Dawson County Public Power District, former Agriculture Department official. Mr. Wallace has a statement for the record.

10. Walter Johnson, Washington, D. C., lawyer, representing Custer Public Power District, Broken Bow, Nebr. Mr. Johnson has a statement for the record.

11. Alex Radin, Washington, D. C., general manager, American Public Power Association. Mr. Radin has a statement on behalf of his association.

12. Summary by member of Nebraska delegation.

STATEMENT OF R. L. SCHACHT, GENERAL MANAGER CONSUMERS PUBLIC POWER DISTRICT, COLUMBUS, NEBR., IN REGARD TO FORT RANDALL-GRAND ISLAND, NEBR., 230-KILOVOLT TRANSMISSION LINE

The following statement is made in behalf of the Consumers Public Power District (Nebraska) in connection with the general matter of marketing hydroelectric power from the Missouri River Basin project, and with specific reference to the construction of a 230-kilovolt transmission line from the Fort Randall, S. Dak., hydroelectric plant to Grand Island, Nebr.

By way of identification, Consumers Public Power District is a public corporation and political subdivision of the State of Nebraska, serving approximately 114,000 electric customers in some 350 cities, towns, and communities in Nebraska. The business of Consumers District is primarily that of serving domestic, commercial, and industrial loads, with rural sales a minor part of its output. It is vitally interested in a strong economy for Nebraska, including that of agriculture, since much of the progress of the State is directly associated with agriculture.

Consumers District is also interested in the orderly marketing of the hydroelectric power from the Missouri River Basin project, so that the maximum economic benefit possible can be secured for both the Federal Government and the ultimate electric customer.

The basic nature and purpose of the Missouri River Basin project requires that large quantities of water be released from the on-river storage reservoirs during the summer months for navigation, irrigation, and domestic purposes, thereby generating large quantities of electric power during those months in addition to the power generated in normal year-round operations. The Federal Government is interested in marketing this summer power under the most advantageous terms possible, so as to secure the best payout schedule on its investment. A market which would utilize large portions of this summer power as a firm commitment is preferable to a market with only secondary or dump needs in assuring revenues to the Federal Government.

Nebraska is in a unique position in that it provides a market for both year-round firm power as well as large quantities of summer or seasonal firm. This will require additional transmission-line capacity to deliver the remaining 30,000 kilowatts of the present 100,000 kilowatt contract commitment to Nebraska, as well as seasonal firm and additional year-round firm which will be available to Nebraska from dams presently authorized and under construction.

The market for summer firm power in Nebraska comes from two sources. One, the use of electric power for irrigation pumping for which Nebraska is particularly well adapted, and which will be further developed by testimony of others before this subcommittee.

The other source of load for summer firm power is for air-conditioning in residences, stores, commercial buildings of all kinds, industries, and on the farms. Nebraska is the only State in the Missouri River Basin which is within economical transmission distance of the on-river dams and which is in a latitude such as to require large amounts of power for summer air-conditioning purposes.

The marketing objectives of the Federal Government and the unique power requirements of Nebraska find a common solution in the construction of a 230-kilovolt line from Fort Randall to Grand Island. Such a line will market power from presently authorized dams at a reasonable cost and will not have the dis-

advantage of an alternate lower voltage line of inadequate capacity for the definitely foreseeable loads.

Such a high-capacity line built by the Federal Government is in keeping with the marketing plans which have been consistently followed in other States in the area, where lines have been or are being constructed to major load centers. If Nebraska were required to build such facilities to the bus bar, it would introduce a new marketing procedure not followed in other States of the Missouri River Basin and would effectively destroy the preference stipulated in the Flood Control Act of 1944 for public agencies such as found in Nebraska.

Recognizing all of these factors, the board of directors of Consumers Public Power District, on September 24, 1954, unanimously passed resolution No. 874 (copy attached) endorsing the construction of a 230-kilovolt line between the Fort Randall hydroelectric plant and Grand Island, Nebr., and lending its full support and assistance to that program.

RESOLUTION OF CONSUMERS PUBLIC POWER DISTRICT—NO. 874, ADOPTED SEPTEMBER 24, 1954

Whereas the economy of the State of Nebraska is dependent primarily on the production of foodstuff and fiber products from its lands; and

Whereas the State is blessed with the priceless asset of an abundant underground water supply over much of its area; and

Whereas by means of pump irrigation, the productivity of much of the State has already been materially increased; and

Whereas this board of directors being interested in all programs which further expand the economy of the State, are vitally interested in the development of additional pump irrigation throughout the State; and

Whereas the United States Bureau of Reclamation has recently initiated a special rate for electric power used for irrigation pumping, by which large quantities of surplus power available during the summer months from the Missouri River Basin project can be put to beneficial use for irrigation and reclamation purposes; and

Whereas to effect delivery of such low-cost power from the hydroelectric plants on the Missouri River to areas of Nebraska where it can be most effectively used requires the construction of a transmission line from the Fort Randall hydroelectric powerplant to the vicinity of Grand Island, Nebr., funds for the construction of which transmission line the Bureau of Reclamation are recommending in their 1956 fiscal budget: Now, therefore, be it

Resolved, That this board of directors of Consumers Public Power District endorse and support the construction of the proposed Fort Randall-Grand Island transmission line: Be if further

Resolved, That the management of Consumers Public Power District be instructed to lend such support and assistance as possible in the matter of securing budget approval and to request such assistance from individual members of this board of directors as may be desirable to accomplish this objective.

RESOLUTION NO. 9.—FORT RANDALL-GRAND ISLAND 230-KILOVOLT TRANSMISSION LINE

Whereas the State of Nebraska, an all-public power State, is primarily engaged in agricultural pursuits and has an abundant natural resource in its extensive ground water supply; and

Whereas the full and beneficial development of this natural resource is dependent upon the availability of ample quantities of low cost electric power for pump irrigation purposes; and

Whereas the Missouri River Basin project on the main stem of the Missouri River project will soon have available large quantities of secondary power during the summer months, which power will not be available during other months of the year and for which power there is no foreseeable market except at dump rates unless such power is utilized for pump irrigation purposes during said summer months; and

Whereas the utilization of said secondary or seasonal power for irrigation purposes will result in a twofold benefit—(1) it will conserve and put to beneficial use for agricultural production the abundant supply of ground water in Nebraska now largely unused, and (2) it will provide a ready market at reasonable rates for

large blocks of power produced by the Government to help repay the cost of the Missouri Basin project; and

Whereas the Nebraska public power system has petitioned the Department of the Interior and the Congress of the United States for budgetary appropriation of funds for construction of a 230-kilovolt transmission line by the Bureau of Reclamation from Fort Randall powerplant to Grand Island, Nebr., to achieve the aforesaid purposes: Now, therefore, be it

Resolved, That the American Public Power Association favors the construction of said transmission line by the Bureau of Reclamation and that the officers and management of the association are hereby instructed to support the efforts of the Nebraska public power agencies in the accomplishment of this objective.

Resolution adopted May 5, 1955, at American Public Power Association Convention, Jacksonville, Fla.

FORT RANDALL-GRAND ISLAND TRANSMISSION LINE—STATEMENT BY ERNEST SJOGREN

My name is Ernest Sjogren. I am a farmer near Funk, Nebr. I am president of the Southern Nebraska Rural Public Power District of Grand Island, past president of the Nebraska Rural Electric Association, and represent the rural power districts of Nebraska on the board of directors of the National Rural Electric Cooperative Association.

The Southern Nebraska Rural Public Power District, Grand Island, Nebr., is vitally interested in having the proposed line constructed in order that low-cost irrigation power will be available for pump irrigation. The district furnishes electric power service in the counties of Hamilton, Merrick, Hall, Adams, Kearney, and Phelps in central Nebraska. The area served is a semiarid region which depends on irrigation for full-crop production. The extent to which pump irrigation is in use can be seen by the record of the number of pumps in operation in the district's six-county area as listed in a report released by E. C. Reed, conservation survey division, University of Nebraska. According to the report the pumps installed as of January 1, 1955, are as follows:

Hall County	1,696
Merrick County	plus 1,300
Hamilton County	479
Kearney County	297
Adams County	269
Phelps County	215

Additional pumps are being installed as fast as well drillers can install them. Nearly all farmland which can be irrigated in the area served by this district is now being irrigated and a large number of sprinkling systems are coming into use to irrigate the land not level enough for normal gravity-flow irrigation.

During the irrigation season of 1955 this district will be furnishing power service to approximately 900 pumps and in the next 5 years it is expected that an additional 1,000 pumps will be connected. In excess of $1 million has been invested by the district to date for facilities to furnish electric power for pump irrigation and an additional $3 million investment is planned over the next 5-year period. The program of furnishing power service for pump irrigation is being carried on because of the many advantages to the farm operators in having electric power for pump operation and also because we have had definite indications that low-cost irrigation power would be available from the Fort Randall plant.

Even though electric power for pump operation has many advantages over other type power for irrigation it is also necessary that the rate be low enough to make it economically feasible for the farmers to use and also low enough to be competitive to the extent that sufficient density of connections can be obtained to make the district investment feasible. Therefore, considerable thought and study has been given by the directors of this district to the problem the past several years, including a visit with Department of the Interior officials in the fall of 1953. At that time it was indicated that additional blocs of power would be available from the Fort Randall plant during the season of the year that power is required for irrigation.

It is the conclusion of the directors of this district that reasonable low-cost power to a majority of the pumps can be furnished for pump irrigation only under the following program:

(1) Low cost Federal power for irrigation be made available and delivered to load center in pump-irrigation area.

(2) Power suppliers in Nebraska furnish necessary substations and other facilities to deliver the power from load centers to the REA distribution districts without additional charges over normal carriers charges, for investments required for irrigation load peaks.

(3) The distribution districts supply the power to the farm operator at a reasonable low rate but high enough to amortize their loans.

We believe that the program as outlined above will bring low-cost power for irrigation and will repay all agencies for expenditures required. The REA districts supplying power to the farm operators have shown by past experiences that rates as low as possible are being charged and are repaying their loans. The various power agencies in Nebraska are in agreement in that facilities will be furnished to bring power from load centers to the distribution district under basis as outlined above under item (2). From our studies we firmly believe that the firm power available now and in the near future for Nebraska plus the irrigation power, which will be delivered over the proposed 230-kilovolt Fort Randall transmission line will repay the Federal Government in full for their investment.

In addition to the many benefits that will be realized from more and better irrigation by operation of the irrigation pumps with electric power considerable savings in our costs for electric power supplied to farm homes would also be realized from the additional firm power which would come to the State over the proposed line.

We sincerely believe the construction of the proposed line would bring all these benefits to our consumers and that all expenditures made to bring these benefits will be repaid in full. We therefore solicit your favorable action on an appropriation for sufficient funds for construction of a 230-kilovolt transmission line from Fort Randall to Grand Island, Neb.

STATEMENT OF RAY J. LOWERY RE FORT RANDALL-GRAND ISLAND 230-KILOVOLT TRANSMISSION LINE

My name is Ray J. Lowery. I am a farmer residing in the south-central part of the State of Nebraska. My address Oak, Nebr. I operate 660 acres of land, of which approximately 450 acres are subject to irrigation by pumping of underground water. I am the secretary of the South Central Membership Association, an organization distributing electricity by REA covering an area of approximately 50 square miles. There are approximately 2,800 farms electrified by our association. This area, like the rest of the State, which is underlaid with an abundant supply of water which can and is being used for irrigation, is being developed for irrigation very rapidly.

I am also the State president of the Nebraska Rural Electric Association. I am quite familiar with the power situation in the State. Electric power on the farms has increased much more rapidly than anyone anticipated. This increase in the use of electric power is rapidly depleting the power source within the State and more is going to be needed as soon as it can be obtained. The one source that will greatly benefit the State of Nebraska is the low-cost hydro power that is to be generated at the Fort Randall Dam and also other dams that are being developed in the Missouri River Basin.

It appears that the only way that this low-cost power for irrigation pumping can become available to the Nebraska people is by transmission lines built by the Reclamation Bureau. Thus the reason for asking that the 230-kilovolt line be built from Fort Randall to Grand Island, Nebr.

My experience as a farmer in this area has been that drought conditions frequently exist and a little water applied to the crops at the proper time means the difference between a crop and a failure. I grant that there are other types of power that can be used for this irrigation purpose, but with the cost of operating a farm still increasing and the prices the farmer receives for his products dropping, his margins are becoming smaller and it becomes necessary to shave his expenses wherever he can and one way is by the use of low-cost hydroelectric power.

As a representative of the organizations above-mentioned it is the hope of these people that this committee will see fit to recommend that this 230-kilovolt line be built from Fort Randall to Grand Island. I thank you for your consideration.

STATEMENT OF LAWRENCE BROCK

My name is Lawrence Brock. I am a farmer from northeastern Nebraska, president of the Northeast Rural Public Power District at Emerson, Nebr., and past vice president of the Nebraska Rural Electric Association.

I am making this statement in support of a previous request made by the people of the State of Nebraska to the Bureau of Reclamation asking that the Bureau construct and operate a 230-kilovolt transmission line from the Fort Randall powerplant to Grand Island, Nebr.

We in the State of Nebraska have one of the largest supplies of available ground water known to man. This natural resource, coupled with our fertile soil, is the backbone of the agricultural economy of this State. Since this water supply must be pumped, a cheap and abundant supply of power is mandatory in order to make use of this resource. The heart of the area where this water supply is available is Grand Island, Nebr.

During the summer months when larger amounts of water must be released from dams and additional or seasonal firm power is available, economy dictates that we find the best market available for this extra power. Irrigation pumping is an ideal answer.

We now have a commitment from the Bureau of Reclamation to deliver 100,000 kilowatts of firm power to the Nebraska Public Power System by November 1956. The final block of this power, 30,000 kilowatts, is to be delivered to a point in the central part of Nebraska. The fiscal 1956 budget request from the Interior Department included funds for a 115-kilovolt line from Fort Randall to Neligh to deliver this power. We are informed that the Committee on Appropriations for the House of Representatives has deleted this line from the budget and states in its report that "the committee believes that consideration should be given to the construction of a heavier line at this time instead of entering into the more expensive proposition of one 115-kilovolt line now and another later."

Experience has shown us that the power industry in the past has been notoriously shortsighted. This shortsightedness was due to inability to predict the future. Here we have a case of being able to plainly see the future and therefore there is no excuse for shortsightedness.

We, in Nebraska, are especially interested in Congress appropriating sufficient money, approximately $9,300,000, for the construction of a 230-kilovolt transmission line from Fort Randall Dam on the Missouri River to Grand Island, Nebr. This transmission line, along with the one to Sioux City, Iowa, costing about $13 million to serve loads in northwest Iowa, and one to Granite Falls, Minn., at an approximate cost of $17 million, and possibly others, were planned as a part of the Missouri River project. All of these lines with the exception of the one to Grand Island are under construction. The Bureau of Reclamation has made an exhaustive study of the proposed transmission line and has made a determination of its economic feasibility and has had installed switchboards and name plates labeled "Grand Island 230-Kilovolt Line."

STATEMENT OF FRED WALLACE ON FORT RANDALL-GRAND ISLAND 230-KILOVOLT LINE

My name is Fred Wallace. I am a director of the Dawson-Buffalo County Public Power District. I have lived on my farm 8 miles east of Kearney, Nebr., since 1920.

I have two electric pumps, driven by REA power. In 1920 only my pump was in operation but today there are over 11,000 irrigation pumps in the State of Nebraska and more going in every day. The farmers are asking that their pumps be hooked up to the REA lines, which means we must have more electricity to operate these pumps.

I must stress that we are frequently faced with a drought situation in Nebraska. The farmers are looking to the underground water supply, which is unlimited, to make their crops during July and August. I believe it is much better to help these farmers by giving them the power they need now than wait till they go broke and take care of them by some sort of relief.

Referring to the expenditures made in other States for high-voltage transmission lines and substations for delivery of Missouri River Basin power to the load centers of these States, the Bureau has invested close to $50 million in North and South Dakota.

The Bureau is presently building a 230-kilovolt transmission line from the Oahe Dam to Granite Falls, Minn., at a cost of $17 million and a line from Fort Randall to Sioux City costing approximately $13,600,000 to serve those in Iowa, while the expenditures in Nebraska have been less than $1 million.

It is only fair and equitable to spend $9,300,000 to build a 230-kilovolt line from Fort Randall Dam to Grand Island for the aid of agriculture in the dry areas of our State.

I respectfully submit this statement for your favorable consideration.

Chairman HAYDEN. Senator Thye.

Senator THYE. Mr. Chairman, there are various ones here from Minnesota, including Mr. Victor Hanson, secretary of the Power Development Cooperative Committee. We can call on Mr. Hanson first. We do have others besides him. There are four here altogether. Mr. Hanson, please.

AGRA LITE COOPERATIVE, BENSON, MINN.

STATEMENT OF VICTOR HANSON, MANAGER

GENERAL STATEMENT

Mr. HANSON. Mr. Chairman and members of the committee, my name is Victor Hanson. I am manager of Agra Lite Cooperative, Benson, Minn. I also serve as secretary for the group of 20 rural electric cooperatives in western and southern Minnesota which I am representing here today. These cooperatives have joined with three private power companies that operate in the same areas to request that a 230,000-volt transmission line be built for the purpose of delivering power from the hydroelectric powerplants now being developed on the Missouri River to certain load centers in Minnesota.

A brief review of how and why the cooperatives and the power companies have combined their interests and efforts to bring Missouri River power into Minnesota may be in order. In 1951 these two groups appeared separately before congressional committees and presented divergent views as to how they thought Federal power should be brought into the State, and how it might best be brought to load centers for distribution to the ultimate consumers.

JOINT STUDY OF POWER PROBLEM

Since there was a marked difference of opinion between them it was suggested by Members of Congress that they make a more thorough and, preferably, a joint study of the power problem in their area, and to seek a common solution to that problem, with particular consideration given to the means by which Federal power might best be fitted into the power supply for the area. This advice was followed, and it was found by both groups that they do have common interests, one of which is to serve their respective consumers at the lowest possible cost. Both groups are also keenly interested in holding investments that may be made by the Federal Government to a minimum and yet accomplish the purpose of bringing low-cost Federal power into Minnesota. The plan that we are now advocating is the direct result of a joint study we have made.

LOOP LINE THROUGH MINNESOTA

In past years we have presented this plan to the Congress of the United States, calling for a loop line through Minnesota, tying together existing Bureau lines in North and South Dakota. Last year Congress appropriated funds for a substantial start on our plan. Some funds were approved for a 230-kilovolt line from Watertown, S. Dak., to Granite Falls, Minn.

This work is underway, and we are today appearing in support of the Bureau of Reclamation's request for additional funds to carry on their work. We must admit we are somewhat disappointed in the amount they have requested for this next fiscal year.

We believe that more work should be done on the line that means so much in our area. We feel that the funds requested will not assure completion of the line by the time power will have become available in the Missouri Basin.

In addition to supporting the Bureau of Reclamation in its request for funds for the line into Granite Falls, we wish to add our support to the Bureau's request for funds for the Jamestown, N. Dak., to Fargo, N. Dak., transmission line. This line is an essential portion of the loop we are seeking for Minnesota and which we are certain is necessary to do a complete area job.

One other request we would like to leave with this committee; one that we feel would be advantageous for long-range planning. It is that authorization be granted to the Bureau of Reclamation for engineering studies, and for the right to initiate construction on that portion of the proposed line, running from Granite Falls, Minn., to Fargo, N. Dak.

The group of cooperatives and utilities that are represented here today have complete faith in the reasonableness and the economic feasibility of the plan we have urged for the last several years. We believe that the loop line through Minnesota that we have recommended represents the minimum amount of Federal construction required to adequately serve the area.

Load centers at Granite Falls, Benson, and Fergus Falls, all in Minnesota, must be tied into the Bureau of Reclamation 230 kilovolt transmission line to meet those minimum requirements.

This plan, if fully developed, will make Federal power available at the major load centers in the western part of the State; it will make it possible to integrate a maximum amount of thermal generation in that area to help firm up hydro generation; and it will, in our opinion, provide the best possible return to the Government on the Federal investment.

Senator THYE. Mr. Hanson, in connection with this complete loop that we all hope for and are going to endeavor to complete, you would have to go from Granite Falls clear up to Fargo if you completed the loop?

Mr. HANSON. That is correct.

Senator THYE. And if you went only to Benson, you would be coming to what might well be classified as a sort of a dead end avenue unless you extended and hooked up with Fargo, of which you would naturally take in whatever city laid in that route?

Mr. HANSON. Yes.

Senator THYE. Then you would have a complete circuit, so that if you have a dry season or if you were low in water supply for your

hydroelectric you then have the steam which exists both in ownership of REA's and private utilities, which would feed in to firm up the whole line, and that would be cooperation between private enterprise and hydroelectric developed in the flood control project as well as your reclamation projects off and on the Missouri River. That is what I have been endeavoring to bring about, and I think that that is what you are speaking to here this morning.

Mr. HANSON. Yes; Senator, that is right. I have left my statement very brief, because following witnesses will cover the engineering aspects of this thing much more fully and I think will bring out the points that you have mentioned.

PLANNING FUNDS

Senator THYE. In the House report here I note that $25,000 is for planning, which seems to be rather conservative. I question whether you would get your whole plan developed that will lead you up and connect with the already planned for transmission lines coming into Fargo. As you stated, if we are conservative now, we will not have the transmission lines to wheel the current when the current is made available for wheeling purposes.

Mr. HANSON. That is right, Senator. We believe that this program should be speeded up. It does take time to develop these systems, and the time when there will be power available in the Missouri Basin is approaching quite rapidly. We should like to be ready to receive such an amount of power as is going to be available to Minnesota. If there are no further questions, gentlemen, I believe I should like to defer any further time to following witnesses.

Senator YOUNG. I would like to say, Mr. Chairman, I know of no transmission line more justified than this one and no one appears to be harder to obtain. Minnesota has worked on this thing for a long while and especially Senator Thye.

Mr. HANSON. Thank you, gentlemen.

Chairman HAYDEN. Thank you.

Senator THYE. Mr. Chairman, because of the plane reservations that are held by members of the Northern States Power, I believe if we skip down and take Mr. Bremicker at this time it would make certain that if we have an interruption up here on the floor that Mr. Bremicker's statement would be in and at the same time he would have the opportunity to hold his plane reservation.

Then we will come back to Mr. Mackie.

Chairman HAYDEN. Proceed.

NORTHERN STATES POWER CO.

STATEMENT OF CARL T. BREMICKER, VICE PRESIDENT

PREPARED STATEMENT

Mr. BREMICKER. Thank you very much, Senator.

Mr. Chairman and gentlemen of the committee, my name is Carl T. Bremicker. I am vice president of the Northern States Power Co. I have a prepared statement which I would like to file. In the case of brevity, I would like to brief it for just a moment.

Chairman HAYDEN. We will be glad to have the statement printed in full, and you may highlight it.

(The statement referred to follows:)

STATEMENT OF CARL T. BREMICKER, VICE PRESIDENT, NORTHERN STATES POWER CO.

Mr. Chairman and gentlemen, my name is Carl T. Bremicker: I am vice president of Northern States Power Co., a Minnesota corporation. Our company is engaged in the public utility business in Minnesota, North Dakota, and South Dakota, and in Wisconsin through subsidiary companies.

The electric system of Northern States Power Co. had its origin in 1909, and has grown to cover and serve a 40,000-square-mile area. For your convenience we are attaching a copy of our company system map. The company furnishes service to approximately 700,000 electric customers in 512 communities. We also furnish electric service directly to some 26,000 rural and farm customers, and sell at wholesale to 19 electric cooperatives at 72 points of connection.

It has been the policy of Northern States Power Co. to cooperate at all times with the electric cooperatives in its area. The 19 electric cooperatives and 3 utility companies represented here have worked out a plan of cooperating in providing for the power requirements of the electric cooperatives, known as the Minnesota plan. Under this plan, the Bureau of Reclamation would build only certain 230,000 volt or higher voltage lines in Minnesota necessary to deliver Bureau power, and the utility companies would make available their existing and planned facilities to transport the Federal hydropower from the Bureau's system to the distribution systems of the preference customers. The group believes this plan makes the fullest and most efficient use of the existing and planned facilities of the utility companies as well as those of the cooperatives and will result in the best service at the lowest possible rate to the cooperatives.

In conformance with this plan, we have appeared the past several years, with the electric cooperatives, before the appropriate subcommittees of the Senate and House in support of the Bureau of Reclamation requests for funds to construct the 230,000-volt transmission lines necessary to deliver the Federal hydropower to the terminal points of the companies' major transmission systems. We return today to renew that support.

Let us make our position clear. We are not here asking that electric power be brought into our trade area because of any shortage, or to serve the purposes of Northern States Power Co. Our company is in the business of generating and distributing electricity in our territory, and is prepared to construct the necessary facilities for that purpose. We have, are now, and will continue to take care of the demands of our customers at rates which are fair and provide the overall operational requirements for the conduct of our business. We are constantly planning and building to care for the future requirements of our service area, detailed plans in a large measure being projected at least 5 years ahead. Within this area served by Northern States Power Co., we now have a complete grid of transmission lines adequately delivering the requirements of the territory, including the requirements of 19 rural electric cooperatives. This transmission system is constantly being enlarged and strengthened to meet the growing loads. In fact, a substantial majority of the 19 electric cooperatives represented here today get their electric power from our transmission system.

However, there are some special circumstances involved in the matter now under consideration.

The Congress has determined that dams and hydroelectric generating facilities be installed on the Missouri River in North and South Dakota.

The Congress has determined that the electric power output from these dams, beyond that required for Government needs, be supplied to customers on a preference basis. In our area these preferred customers are the electric cooperatives and the municipally operated utilities.

The marketing of this electric power has been assigned to the Department of the Interior's Bureau of Reclamation. The Bureau, after surveying the potential output of these power developments and further surveying the electrical requirements of the area, apparently has decided that the electric power in question should be disposed of within a marketing area which in part covers the States of North and South Dakota, and a portion of the State of Minnesota.

The 230,000-volt lines under consideration do not duplicate existing or planned facilities of the utility companies or electric cooperatives and serve no purpose other than to transport the Federal hydro power to the terminal points of the

various companies' major transmission systems. Under the postage stamp rate policy of the Bureau of Reclamation, whereby the rates for the Federal hydro power are the same throughout the entire marketing area, it would be uneconomical to finance these lines by any other means. Also, since these lines are an integral part of the extensive Bureau transmission system in North and South Dakota, they must necessarily be under control of the Bureau.

Therefore, the problem is one which basically requires Government solution. The Government has hydroelectric power to sell to its preferred customers. In this instance, the customers within the marketing area in Minnesota are located a great distance from the source of supply. If the power is to be sold in this area, and that is solely a Government problem to be answered by the Congress, it must be delivered where it may be distributed and used.

Here let me make one point clear. Northern States Power Co. is not in favor of governmental power projects when the job of supplying power can be performed by the commercial companies. Our position in this matter is consistent with the position of the electric light and power industry—that Government should not do for the people things the people individually or through their corporate organizations can do for themselves. Therefore, I want to repeat that the present case is a special one due to circumstances created by governmental decisions in the past and by the economic problems of building and financing transmission lines of this capacity and length to serve the preferred class of customer here under consideration.

We have offered our transmission facilities to deliver the Federal hydroelectric energy from the terminal points of the Bureau's transmission system to the preferred customers that may contract with the Bureau in our area, and have negotiated a wheeling contract with the Bureau of Reclamation for this purpose. We stand ready to interconnect our lines with those of the Bureau, and thus avoid costly duplication.

At the present time, our system is interconnected with the Minnkota Power Cooperative system in North Dakota, with the Dairyland Power Cooperative system in Wisconsin, and with the Rural Power Cooperative system in Minnesota. Also, our system is presently interconnected with the Otter Tail Power Co. system in northwestern Minnesota and with the Interstate Power Co. system in southern Minnesota. The engineering studies and detailed plans for the interconnection of our system with the proposed Bureau of Reclamation system have been completed.

The rural electric cooperatives in Minnesota are here asking that this committee appropriate sufficient funds this year in order that the benefits, as outlined in their testimony, may be made available to them. Because of the special circumstances as reviewed above, we earnestly support the cooperatives in their request for sufficient funds for these particular Government-owned transmission facilities.

COMPLETION OF 230-KILOVOLT LINE IN MINNESOTA

Mr. BREMICKER. Thank you.

Mr. Chairman, you are probably familiar with this because this is about the fifth or sixth time I have appeared in support of the REA's requests and Bureau of Reclamation requests for funds for the completion of a 230-kilovolt line into Minnesota to serve preference customers in that area.

Chairman HAYDEN. We are always glad to see you.

Mr. BREMICKER. Thank you. It is always a pleasure to be here because the committee has been very kind to us in the past. The question naturally arises, Why does not the Northern States Power Co., and the Ottertail Power Co., and the Interstate Power Co. construct this line? In order to clarify that I would like to just make this simple statement.

The Federal Government can construct that line at a fixed charge of 6 percent. The REA's could construct it at a fixed charge of 7 percent. It would cost a private utility between 14 and 16 percent in fixed charges to construct this line. We cannot afford to construct the line for the transmission of energy to other people without a profit

for the utilities. I would like to state that we have a Minnesota plan which is a cooperative plan, and which is also now the Government's plan of partnership. We have had that for some time. I think to some extent probably the Government took their partnership plan from our Minnesota plan which we got together 5 years ago.

COOPERATION OF ALL GROUPS

Senator THYE. If I may interrupt at that point, there was some tension between private utilities, the REA, and the advocates of all governmental power. After a conference of all groups getting together you worked out this plan, and I would say that all of Minnesota, both the utilities and the REA, have been in the most friendly of relationship working to accomplish only one thing, and that is the lowest rate possible for the use of electricity and the greatest amount of electricity possible to the area.

Newer utilities can feed back into hydroelectric, and I have never seen a hydroelectric installation that did not need firm-up of some kind for steam power. The minute that we dropped the last generating unit into those plans we would be faced with firming it up. You have in the REA steam plant at Elk River the firm-up that that line would need when it gets into full capacity.

Mr. BREMICKER. I would like to just add to that statement that we have completed and signed just 2 weeks ago by the Secretary of the Interior, a wheeling contract for making our facilities available for the transmission of this energy to the preferred customers. With their 230-kilovolt line feeding into the load center, and we taking it from there, it is the most economical way of delivering that power to the people who have a right to it in the State of Minnesota. I again want to thank you for your consideration. I am not going to take any more of your time. Thank you very much.

Chairman HAYDEN. Thank you.

Senator THYE. Next would be Mr. Mackie. With Mr. Bremicker was Mr. Joseph A. Bush, of Northern States Power Co., sitting right back there. He is also one of the men who has helped bring about this relationship between all concerned from Minnesota.

ELLERBE & CO., ST. PAUL, MINN.

STATEMENT OF EDGAR R. MACKIE, ELECTRICAL ENGINEER

PREPARED STATEMENT

Mr. MACKIE. My name is Edgar R. Mackie. I am chief electrical engineer, Ellerbe & Co., St. Paul. We are the consulting engineers for the 19 cooperatives in southern Minnesota and a good portion of those that are up in Senator Young's territory. With the Chair's permission I would like to file my statement for the record.

Chairman HAYDEN. That will be done.

(The statement referred to follows:)

STATEMENT OF EDGAR R. MACKIE, ELECTRICAL ENGINEER, ASSOCIATED WITH THE ENGINEERING FIRM OF ELLERBE & CO., ST. PAUL, MINN.

Mr. Chairman and members of the committee, my name is Edgar R. Mackie. I am an engineer employed by the firm of Ellerbe & Co. of St. Paul, Minn. I am appearing here today in behalf of 20 REA-financed cooperatives in southern, central and western Minnesota.

Ellerbe & Co. is the largest engineering organization in Minnesota. We have been doing load-study and system design work for REA cooperatives in Minnesota and surrounding States for many years. We made the preliminary studies and complete system design for Minnkota Power Cooperative, Inc., at Grand Forks, N. Dak. This is one of the largest and most successful of the REA power cooperatives. Work connected with REA is less than 5 percent of our total annual business. We now have work in more than 20 States. The above statements are made only to give an indication of our qualifications to prepare the information contained herein.

Ellerbe & Co. made the engineering studies for the 20 cooperatives in the south, central and western areas of Minnesota. Their present requirements are supplied by 4 private utilities and 4 municipalities.

A statement was presented by me before this committee in support of certain Bureau lines last year. In most cases the municipalities are required to run every available unit of generation regardless of condition, just to get by. The Otter Tail Power Co. serves the northwest portion of this area. The Interstate Power Co. serves the southern portion of the area. The Minnesota Power & Light Co. serves only five substations in this area. Two of the member cooperatives are supplied by REA-financed generating plants—one at Benson, Minn. and one at Jackson, Minn. The Northern States Power Co. serves the balance of the area.

Our letter addressed to the four utilities and dated August 26, 1950, clearly indicated our problem and requested information on what quantities of power could be made available to us.

Our study shows that the most practical and feasible solution to the overall problem is to provide these cooperatives with Bureau of Reclamation power from the Missouri Basin. The only reasonable solution is to place the Bureau lines in operation at the earliest possible date.

Our recommendation to the 20 cooperatives was that the most practical solution to the overall problem would be to integrate all of the existing facilities. Negotiations with the power companies were carried on in an effort to determine the best overall solution. As a result of these negotiations and studies by the power companies, the following basic plan was developed:

1. That the power companies interconnect their systems to relieve the areas where shortages exist—these interconnections to take place as soon as possible to solve these shortages during the interim period. Contracts have been signed by the three power companies represented here.

2. That the Bureau of Reclamation build a backbone 230,000-volt transmission system within a 250-mile radius of the source. The initial construction to consist of a 230,000-volt line from Fargo, N. Dak., to Fergus Falls, to Benson, to Granite Falls, Minn., and thence back to the source in South Dakota.

3. That the Bureau of Reclamation build the necessary substations at approximately the points named in item 2 above and at Sioux Falls, S. Dak.

4. That the power companies in the area enter into wheeling contracts with the Bureau of Reclamation to wheel power from the above points to the load centers of all the preferred customers in the Bureau marketing area.

5. That the power companies in the area build the required low-voltage transmission lines to increase their system trasnmission capacities as required to wheel the power from the above points to the load centers.

6. That the preferred customers in the area could, by virtue of the above conditions, become direct customers of the Bureau of Reclamation without additional expenditures by the customers. New load centers of the electric cooperatives might require some new line and substations construction on their part.

7. That all parties—the Bureau of Reclamation, the power companies, the cooperatives, and the municipalities—integrate their facilities to give the maximum benefits to the consumers.

8. That the power companies continue to supply power requirements over and above that available from the Bureau of Reclamation.

The plan as outlined above solves some very perplexing problems. The solution of these problems provides the following:

1. A guaranty of an adequate source of power for the preferred customers in the area at the lowest overall cost. It should be pointed out that the combined present (1955) load requirements of the preferred customers in the market area in Minnesota are of such magnitude as to render any one line incapable of delivering these present requirements without considerable supporting equipment. It further follows that considering a load in excess of 200,000 kilowatts in 1956 when

Bureau power becomes available, and the increasing loads thereafter definitely require a minimum of a loop of at least 230,000 volts.

2. An immediate market for Reclamation power.

3. An immediate return on the money already invested by the Government in both dams and transmission lines.

4. The greatest distribution of Reclamation power to the maximum number of preferred customers with the lowest possible investment by the Government.

5. The interconnection of Government-owned generating capacity with privately owned generating capacity in excess of 1,500,000 kilowatts. The majority of this privately owned capacity is on the opposite end of the transmission facilities from the location of the Government-owned generation. This greatly improves the reliability of the entire system.

It is my firm belief that the value to the Government of the firming capacity available from the above plan is, in actual dollars and cents, more than the total cost of the entire line for which we are asking. The Government must, in order to get the maximum return on its investment, provide this firming capacity by some means.

In any discussion of the above problems, the question always comes up as to what actual need this area has for this line. To my knowledge there has not been a single case in the United States in the past 15 years, excluding World War II years, that any customer has actually been refused service at a price. It stands to reason that any power company would render service to any customer in any location if the customer can and will guarantee a reasonable return on the required investment. No doubt many people have appeared before this committee on the basis that a great need existed because of the lack of any source of power. Such a lack must of necessity originally have stemmed from the failure or the inability of these people to support the required investment. I state these facts only to show that in all cases, actual need must be based on cold, hard dollars and I state my case as follows:

The 20 cooperatives represented by us purchased approximately 270 million kilowatt hours in 1954 at a cost of approximately $3 million. This power was produced mainly in fuel-burning plants in high fuel cost areas. If this power had been purchased from the Bureau of Reclamation at their present established rate of 5.5 mills for power produced by their hydro development, a saving of approximately $1,600,000 would have been made. By 1960 these same 20 cooperatives alone will purchase during the year approximately 480 million kilowatt-hours. With the same comparison of purchasing conditions as above, a saving of $3,600,000 will be realized.

The 20 cooperatives have a total membership of approximately 80,000 families, and the municipalities and others in the area increase this to approximately 180,000 families.

I believe the proposed solution to be sound, effective, and desirable to these 180,000 families, as well as to all parties involved in it.

I would like to point out the following pertinent points with regard to this proposed solution:

1. Less money and material will be expended to do the job than under any other system.

2. The same overall economy could not be effected by the Government doing the job by itself or the power companies by themselves or by the preferred customers doing the job alone. The reasons for this statement are as follows:

(*a*) If the Government through its marketing agent attempts to do the entire marketing job, a good deal more money would have to be invested in transmission and substation facilities. This would result in little increase in gross revenue to the Government and in my opinion an actual decrease in net revenue to the Government.

(*b*) If the power companies are asked to build the required lines necessary to deliver Reclamation power from the dams to the preferred customers in Minnesota, it becomes practically mandatory that they do so as utilities at a fair price. In this case, however, what is the fair price? It must be sufficient to meet property tax, income tax, operation, maintenance, all other fixed costs, and to yield a fair return to the investors. This will be explained by another witness. A more important point is, in my opinion, the fact that the resulting cost to the preferred customer would be such as to not decrease the overall cost of power to him.

(*c*) If the preferred customers attempt to construct the necessary facilities to deliver power to themselves with REA financing, they are faced with the following

comparison: Assume the maintenance cost to be equal for the Bureau of Reclamation and an REA-financed line. The Bureau pays 3 percent interest and no taxes. A cooperative using REA money pays 2 percent interest plus approximately 2 percent State taxes. This increase in yearly cost of 1 percent per year if the line is built with REA money, plus the cost of the additional facilities that would have to be built if the combined plan is not used, results in no saving to the customer. Any combination of plans A and C can basically only change the total property tax paid. The construction of facilities that are not required under the proposed basic plan cannot be eliminated.

3. The same effective security and reliability of service cannot be had by any other system at a reasonable cost.

4. A system study showing the operation of the combined systems has now been completed jointly by the parties concerned which proves that the plan is sound and feasible. This study was made on the Bureau of Reclamation Board in Denver in February 1952.

5. This study further proved that the loss within this combined system was not excessive. In fact, the losses generally were less than 25 percent, which is reasonably low on such a system.

6. In many cases the Government is required to finance and construct fuel-burning plants to provide the firming capacity that would be supplied by the adoption of our plan.

Money was provided last year and construction of a line from Big Bend, S. Dak., to Granite Falls, Minn., was initiated. This section of line which is a good start will provide a desirable part of our overall plan.

We believe that the proposed $5,255,000 should be provided at this time. We also believe that a line from Granite Falls, Minn., to Benson, Minn., to Fergus Falls, Minn., to Fargo, N. Dak., should be started at this time.

If the maximum benefit to the most people with a minimum of funds is to be provided in the initial stage, this section of line is very necessary. Naturally, we would like to have our entire project initiated at this time, but we also believe that Federal expenditures should be cut to a minimum. Two of the largest load centers in our area are Granite Falls and Fergus Falls. The highest fuel cost centers in our area are Granite Falls, Benson and Fergus Falls. Therefore, by providing Bureau power to these three points in the initial stage, the maximum could be done with a minimum of funds.

We believe that the proposed $3,035,988 for the Jamestown-Fargo 230-kilovolt lines and the $1,040,000 for the Fargo-Grand Forks 115-kilovolt lines should be made available. We are not asking the Government to give us this money. We are asking for a loan by the Government to the designated marketing agent. Such a loan will, in this case, be paid back more rapidly than in most cases because the load or market already exists and stands ready to yield an immediate return on such a loan.

The Government investment, in my opinion, would be repaid in full. Commitments have been made by the power companies to the cooperatives in the companies' letter of December 21, 1951.

GENERAL STATEMENT

Mr. MACKIE. I am not even going to highlight it, if you do not mind, because Senator Young knows more about it than I do; Senator Thye does; and, Senator Hayden, I think you have heard me five times. I would like to add merely this comment: That in my prepared statement I have included the budget figures for three specific lines, the line from Watertown, S. Dak., to Granite Falls, Minn.; the line from Jamestown to Fargo in North Dakota; and from Fargo to Grand Forks in North Dakota, the latter being a 115-kilovolt line. The budget figures for those three specific lines are included in my prepared statement along with the other technical data and the money advantages and all the other things which all three of you gentlemen have heard repeatedly year after year.

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PLANNING FUNDS

Senator THYE. As an engineer would you have any comment on that question of the $25,000? It says here in the report:

Of the amount allowed, $25,000 is to be used for planning for construction of an extension of the Big Bend, S. Dak.-Granite Falls, Minn., transmission line to Benson, Minn.

Mr. MACKIE. I believe this is a correct statement, Senator. If we go back to the similar problem when we asked for planning money on the initiation of the Granite Falls line, I believe the Bureau's request was $300,000, for almost the identical situation and a quite similar length of line from Watertown to Granite Falls, as we are now talking about from Granite Falls to Fargo.

Senator THYE. The language says Benson, and that is what disturbs me. That stopping at Benson does not give us the planning that is necessary to construct a line that will serve not only the purpose for which we are endeavoring, but it is the most reasonable thing to plan for and that is to complete your circuit. You would not have a tie-in unless you go to Fargo and then you would have a gap of which you could not reverse from the private utilities to hydroelectric if you desired, because you wouldn't have the flexibility as I would not have connections.

Mr. MACKIE. From an engineering standpoint, Senator Thye, if a 230 line, let us say, was built from Granite Falls to Benson, it would just be a complete and unpardonable blunder. You could not use it for any practical purposes.

Senator THYE. Just to Benson?

Mr. MACKIE. Yes.

Senator THYE. That is what leads me to ask these questions of you, because you are particularly trained to answer intelligently. All that I have ever heard from those who know the answer to this question is that going only to Benson is not the advisable thing to do, that we should plan to go clear to Fargo and make the complete circuit, and that is what I would like to bring out here, Mr. Chairman, because I think that we should examine this question and see in the committee recommendation here on the Senate side that we do tie in the two transmission stops now; the one coming in through Watertown in South Dakota and the other one coming into Fargo in North Dakota, so that we go down through Granite Falls, Benson, and Fergus Falls to make the circuit complete.

Mr. MACKIE. I think in all fairness to the House committee—as you people are fully aware; we also appeared before that committee for the same number of years—I am sure that their intent was to merely initiate the beginning of the Granite Falls–Fargo line. I think they had no intention, and I am talking out of school, at all of stopping in Benson. It was really the initiation of completing the line.

Chairman HAYDEN. That seems to be a logical conclusion.

Senator THYE. Yes, but we need more money.

Mr. MACKIE. In line with your thinking, I think in committee it would be much more advantageous to everybody concerned to change the language to initiate the complete line.

Senator THYE. Thank you.

Chairman HAYDEN. Thank you for your statement.

Senator THYE. The next will be Mr. Hartl, vice president of the Otter Tail Power Co.

OTTER TAIL POWER CO., FERGUS FALLS, MINN.

STATEMENT OF ALBERT V. HARTL, VICE PRESIDENT AND TREASURER

PREPARED STATEMENT

Mr. HARTL. Mr. Chairman and members of the committee, my name is Albert V. Hartl, and I am vice president and treasurer of the Otter Tail Power Co. Again as the chairman will realize, I likewise am making quite a few appearances here. In the interest of brevity I will further condense a statement filed with you that the purpose of my appearance today is to indicate that Otter Tail Power Co. still vigorously and wholeheartedly supports the position of the REA cooperatives here today in their request for appropriations.

Chairman HAYDEN. Your statement will be included in the record.

(The statement referred to follows:)

STATEMENT OF ALBERT V. HARTL, VICE PRESIDENT AND TREASURER OF OTTER TAIL POWER CO., FERGUS FALLS, MINN.

Mr. Chairman and gentlemen, my name is Albert V. Hartl; I am vice president and treasurer of Otter Tail Power Co., a Minnesota corporation, which supplies electric energy to almost 500 communities in Minnesota, North Dakota, and South Dakota, plus helping to supply 19 REA cooperatives at 49 points of connection.

The purpose of my appearance today is to indicate that Otter Tail Power Co. still vigorously and wholeheartedly supports the position of the REA cooperatives here today in their request for appropriations.

We consider it highly desirable that the Bureau of Reclamation receive the necessary funds to assure building of 230 kilovolts lines to Granite Falls, Minn., and West Fargo, N. Dak.

Our company has a signed contract for the wheeling of Bureau power to preference customers in Minnesota. Such a contract will be meaningless if the Congress does not supply the necessary funds to build the connecting links between the source of energy and the potential loads within the marketing area portion of Minnesota.

We sincerely feel that the unified efforts of the REA cooperatives and the private utilities in Minnesota during the past few years have shown the advantages accruing to everyone—cooperative, utility, and general public. We are glad to have been a part of that effort. It is our desire to continue work with these REA cooperatives in Minnesota, to the end that the most satisfactory and most economical solution to their power problems be formulated.

RELATIONSHIP BETWEEN COMPANIES AND COOPERATIVES

Senator YOUNG. I believe we have the best working relationship between the power companies and REA cooperatives in our area of any place in the United States. You have an interchange of power, don't you, between the REA and your company, and the Northern States Power?

Mr. HARTL. That is correct. Our facilities are used by all that you mentioned—Minnesota power cooperatives, central cooperatives in your State, and we have interconnections with the Northern States Power Co. We likewise, as Mr. Bremicker mentioned, just recently completed the negotiation and signing of wheeling contracts with the Bureau of Reclamation dedicating our facilities to the transmission of power.

Senator THYE. I want to say this for the Minnesota REA. I know of no group of men who have worked harder or fought more diligently for the cooperative and the REA user than the men that are in this

room here today and a few other men that would have been here if they had not had other assignments. They recognize the advantages to working together on this project in Minnesota, to try to unite the two ends—the Watertown stub line of transmission and the Fargo—and in doing that they will get the maximum of current and they will get it at the lowest rate possible and at the same time have the firming up that the utilities can offer in their steam plant. So with respect to the REA's of Minnesota, I have never known a group of men who have persisted in their efforts to make possible the greatest amount of current to a State as the Minnesota REA people have.

I am glad to see you gentlemen here. You could have had dozens more with you if you had only said the words, "Come along," because they were ready to come down if the word had been passed to them.

Thank you, Mr. Chairman.

Chairman HAYDEN. You are very welcome.

Senator THYE. Those are all the men that we have here to testify, Mr. Chairman. As I stated, we could have had dozens more had we just passed the word out, but we did not think it was necessary.

PREPARED STATEMENT

We do have a statement from Mr. C. A. Hummel, executive vice president of the Interstate Power Co. that I would like to have included in the record.

Chairman HAYDEN. That will be done.

(The statement referred to follows:)

STATEMENT OF C. A. HUMMEL, EXECUTIVE VICE PRESIDENT, INTERSTATE POWER CO.

Mr. Chairman and gentlemen, my name is C. A. Hummel and I am executive vice president of Interstate Power Co., a public-utility serving electricity to 94,970 customers located in 224 communities and on 11,130 farms. In addition the company supplies electricity indirectly to 16,000 rural customers through wholesale electric service to rural electric cooperatives. A substantial number of these are located in southern Minnesota within the Missouri Basin marketing area.

During the past years we have appeared before congressional committees in support of requests by the Bureau of Reclamation for funds to build 230,000-volt transmission lines in western Minnesota.

Interstate, together with the other utility companies, Otter Tail Power Co. and Northern States Power Co., is actively engaged in expanding its generation and transmission facilities and in interconnecting its system with those of its neighbors. This expansion and interconnection program has been carried out as part of our responsibility for providing adequate facilities for the distribution of power in Minnesota.

We are presently working with the Bureau of Reclamation on a transmission service or wheeling contract whereby we will wheel power for the Bureau to its preference customers in southern and western Minnesota. This contract is now in its final stage of preparation and will be signed in the very near future.

Our ability to transmit Missouri Basin power to the Bureau's customers is dependent upon the ability of the Bureau to deliver substantial blocks of power to Granite Falls and Fargo. Interstate is here today in support of the requests by the Bureau of Reclamation for funds to build the 230,000-volt transmission lines necessary to accomplish this job.

The means to distribute Missouri Basin power to the individual customers have been worked out. These high-voltage transmission lines are still needed to deliver the large blocks of power to the systems of the utilities. The various parts of the system already built are of no value to preferred customers in Minnesota without the connecting links that will make the system function.

We, therefore, respectfully urge this committee to act favorably on the request for funds to build the 230,000-volt lines to Fargo, N. Dak., and Granite Falls, Minn.

Chairman HAYDEN. Congressman Engle, we will be pleased to hear from you at this time, so you can attend your other committee.

STATEMENT OF HON. CLAIR ENGLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

TRINITY RIVER DIVISION—CENTRAL VALLEY PROJECT

Representative ENGLE. Thank you very much, Mr. Chairman.

I very much appreciate taking my testimony out of order and I will make it brief out of deference to those who are here to follow me.

PREPARED STATEMENT

Mr. CHAIRMAN. I have a statement which I would like to have made part of the record.

Chairman HAYDEN. That will be done.

(The statement referred to follows:)

TRINITY RIVER DIVISION—CENTRAL VALLEY PROJECT

The Trinity River project in California—a part of the Central Valley project—can be put on construction status without increasing the total amount of money budgeted for the Central Valley project in the current budget submitted to Congress. The 1956 budget recommendations for the Central Valley project include $400,000 for advanced planning for the Trinity River project. This amount can be shifted to a construction item—and there is sufficient slack in the moneys appropriated for distribution systems in the Central Valley, as well as some of the other features that will not be immediately needed, to permit an increase of construction funds for the Trinity River project to the extent of $1 million. The insertion of the following statement would permit the start of construction of the Trinity project without increasing the funds to be appropriated: "*Provided*, That not to exceed $1,000,000 of the amount appropriated herein for the Central Valley Project under 'Construction and Rehabilitation' and for the Trinity River Division under 'General Investigations' may be available to initiate construction of the Trinity River Division."

1. The Trinity River project was authorized under the 1939 Reclamation Act by a finding that it met the rigid requirements of that act filed by Secretary of the Interior Chapman on January 2, 1953.

2. Secretary Douglas McKay on February 17, 1955, approved the Trinity River project and recommended its construction in a supplemental report. Therefore, this project has the approval of both Secretary Chapman and Secretary McKay.

3. Commissioner of Reclamation Dexheimer, in his testimony before the House Committee on Interior and Insular Affairs on April 13, 1955, recommended immediate commencement of construction of the Trinity River project, asserting that construction of the main dam would require approximately 5 years, that the construction period for the tunnels would be much shorter, and that there would be a period of about 3 years after start of construction of the dam during which details currently in discussion with the State engineer of California could be ironed out without delaying the construction program.

4. The State engineer of California, in his official comments on April 9, 1953, approved the project report on the Trinity River project and urged its immediate authorization and construction, and on May 28, 1955, again filed favorable comments on this project.

5. Governor Goodwin Knight of California on April 14, 1955, wired the House Committee on Interior and Insular Affairs reaffirming the State's official position in support of the immediate commencement of construction of the Trinity River project.

6. Since 1942 more than $572,000 has been spent by the Bureau of Reclamation in planning and preliminary engineering on the construction of the project.

7. The Trinity project is immediately needed in California because the Central Valley canals which are presently under construction depend upon the Trinity River diversion for a portion of the firm water supply. In addition, there is a

desperate need for additional water in the San Joaquin Valley where 500,000 acres are going out of production in the next 5 years unless supplementary supplies of water are made available. Since construction will require a minimum of 5 or 6 years, it is imperative that there be no delay in getting under way.

HISTORY OF THE TRINITY RIVER DEVELOPMENT

The Trinity River Division is an addition to the Central Valley project which would divert approximately 700,000 acre-feet of water annually from the Trinity River into the Central Valley of California. The diversion of this amount would provide about 1,200,000 acre-feet of water for additional use in the Central Valley. By conveying the water through a series of powerplants, over a billion kilowatt-hours of electric energy would be generated annually through the installation of 233,000 kilowatts. There is an immediate need for all this energy to meet the ever-expanding demands in northern California.

Since 1923 the Trinity development has been studied by various agencies including the State of California and the Federal Power Commission. It was included in the State water plan in 1931. In 1942 the Bureau of Reclamation started intensive studies looking towards authorization and construction of the Trinity River development. The feasibility report was completed in 1951. The report and findings by the Secretary of Interior on the Trinity River Division were transmitted to the Congress on January 2, 1953. To date $572,000 have been spent on investigations (including estimated expenditures between now and July 1). Of this amount $140,000 have been spent subsequent to authorization. This has permitted detailed studies including geologic investigations of the dam sites and the initiation of final designs.

The detailed studies subsequent to authorization have resulted in some modification in the plan, the principal change being a recommended increase in the capacity of the Trinity Reservoir. A supplementary report dated July 1954 setting out the modifications recommended in the plan has been completed, is presently under review by the State of California, and will be furnished the Congress in the very near future. However, the modifications in the authorized plan are such as to make it unnecessary to delay the appropriation of funds to undertake construction until there has been final approval of the changes.

GENERAL STATEMENT

Representative ENGLE. I would like to also deliver it to the members of the committee for their information.

Mr. Chairman, I am here today in support, of course, of all of the items in the budget recommended for the Central Valley project in California, but more particularly I am here to express my concern about the Trinity River project.

The House committee, on page 9 of its report, included certain language with respect to the Trinity River project, as follows:

> The sum recommended by the committee includes $1 million, for initiation of construction on the Trinity River Division of this project—

referring to the Central Valley project—

> which is to be obligated by the Department upon specific authorization of this division by the Congress.

The background of this situation is this: The Bureau of the Budget sent up $400,000 for additional advance planning on the Trinity River project. The Government has spent up to the present time about $572,000 on planning on the Trinity River project.

I went to the House committee and asked them to transfer that $400,000 to the construction fund and then to reallocate the $14 million which was recommended by the budget for the Central Valley so as to allow an additional $600,000 making up the $1 million, to start construction on the Trinity, and I suggested the language which

appears in this statement, which I have just submitted to the committee.

That is not precisely the language used by the House committee, but the House committee, in its report, did include this language and included it unanimously.

In short, everybody on the subcommittee, including Mr. Evans, head of the subcommittee, supported the inclusion of this language.

Then when we got on the floor of the House my friend, Dr. Miller, in an effort to aid the irrigation and reclamation in the West offered an amendment to return back to the $14 million figure, among others, recommended by the budget.

Some people down in the Interior Department tell me that that wiped out my million dollars and returned into the appropriation bill the $400,000 on advance planning.

My contention is that I keep the million and got $400,000 besides, that is, that the effect was to increase the appropriation.

The House committee limited the appropriation for the Central Valley to $11.3 million. It was $14 million. They struck $3.7 millions out of it, so they reduced it to $10.3 million, and then added a million for the Trinity, making the sum $11.3 million. That is the way they did it. It is my contention I did not lose that, but I just do not want to be in any doubt about it, so I have come over here to ask you gentlemen to repeat the language in your report, because this language was inserted in the House report unanimously. It was supported by Mr. Jensen, on the subcommittee, and by Mr. Joe Evans, and when my friend from Nebraska, the ranking member of my committee in the House, undertook to raise this amount, it was a pure inadvertence that his shot fired as hard backwards as it did forwards, so far as some of these items were concerned.

So, in the light of the unanimous House action in their report and the pure inadvertence by which apparently there is some legal cloud cast upon this item, I hope that you gentlemen will see fit to restore it.

I am not going to belabor you with the merits of the case, because it is thoroughly set forth in the memorandum which I have prepared and submitted to you.

The Trinity River project is probably the best major water and power project left in the United States. It was authorized by Secretary Chapman, by a finding of feasibility under section 9 (a) of the 1939 Reclamation Act. That is how good it is. That means it has to be able to pay out in 40 years plus a 10-year development period.

Chairman HAYDEN. This report says:

on specific authorization of this division by Congress.

What is the status of that?

Representative ENGLE. That bill is on the floor of the House today and I anticipate it will be over here this afternoon.

I was going to explain that. Secretary Chapman authorized this project and filed a finding of feasibility on it before he left office under section 9 (a) of the 1939 Reclamation Act.

The Interior Department, the following year, set up $100,000 to put the Trinity River in construction status.

The Appropriations Committee took a look at it and said, "We ought to have authorization by Congress on a project of this kind," so I put this Trinity bill in.

The Senate report, Report No. 1460 of the 83d Congress, 2d session, dated April 1, 1954, makes specific reference to the Trinity project, and said they moved that $100,000 out of construction status and back into advance planning, because they wanted a specific authorization by Congress, so I went before the subcommittee over on the House side and called their attention to the fact that in 7 different instances, involving $350,000 altogether, including the Monticello project in California, or the Solano, as it is called, which is one of the senior Senator's from California favorites, a similar rule was not applied; that is, on a secretarial finding of feasibility, they had gone ahead and applied money, so I asked our committee to put it back in and they said they would, but inasmuch as there this bill was on the way and it looked like there was no opposition to it, they would put the tag end on that it would be put into construction status just as soon as the bill went through.

Chairman HAYDEN. Your request is that we repeat in our report the language in the House report?

Representative ENGLE. That is right.

Chairman HAYDEN. Word for word?

Representative ENGLE. That is exactly and precisely what I am requesting, and if that is done, it will remove the cloud on the present situation.

I make the suggestion, Mr. Chairman, without conceding the correctness of the position taken by some of the people in the Department of the Interior, in case I have to argue that point later.

ADVANCE PLANNING FUNDS

Senator DWORSHAK. Do you not need any additional funds for advance planning? Has all the engineering work been done?

Representative ENGLE. They spent $572,000 on advanced planning and what I asked them to do was pick up the $400,000 and put it along with the additional $600,000, because whenever you get to that stage of a project it is hard to say where advance planning stops and construction begins.

It is a matter of legal status and that is the importance, of course, of this million-dollar item.

It does not mean a great deal in additional funds, but it means the difference between being in construction status and being in the position of advanced planning.

Chairman HAYDEN. It makes a difference to us in this respect: that if construction is authorized and money is made available for it, planning money is then charged to construction and the planning money that we have, therefore, is relieved by that amount.

Representative ENGLE. I would say on that, Mr. Chairman, I asked the subcommittee to move the $400,000 over so it would not disturb the budget figures. In other words, this device I used did not add a dime to the budget figures. It simply constituted a reallocation of funds and there is sufficient slack in carryover items and in some of those distribution systems out in California that they can do that without any difficulty at all.

Chairman HAYDEN. I think you are right.

Representative ENGLE. So in another part of their report, they specifically prohibited the use of planning funds on the Trinity,

because they put that $400,000 over in the other item, and I am perfectly happy with that.

I will be very delighted if I can get that language back.

Thank you, Mr. Chairman, for giving me this time, and again for permitting me to testify out of order. I ask consent to revise my remarks.

Chairman HAYDEN. That may be done.

HELENA VALLEY PROJECT, MONTANA

STATEMENT OF HON. LEE METCALF, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MONTANA

GENERAL STATEMENT

Chairman HAYDEN. Congressman Metcalf?

Representative METCALF. Mr. Chairman and members of the committee, I am Lee Metcalf and I represent the First District of Montana.

I am here to appear especially for a continuation of the Helena Valley unit, which is an irrigation project near my hometown.

There is an item in the budget and in the appropriation bill for that.

I also urge this committee to provide money for the Clark Canyon project. Mr. Rising will testify later for the Montana Water Conservation Board and there will be statements in the record taking care of the details of those projects. They are very worthwhile.

I also want to urge this committee to provide money for Yellowtail Dam. Yellowtail Dam is not in my district; yet, it is a part of the Missouri Basin project. The Missouri River rises in my district and I am, of course, concerned in getting kilowatts for all of Montana.

This committee, and the distinguished Senator Mansfield especially, provided Hungry Horse Dam for western Montana and it has been of a great deal of benefit not only to western Montana but also to the Pacific Northwest and this Nation.

The people of eastern Montana have seen those benefits and seen what can be done for them with Yellowtail Dam. The feasibility of Yellowtail has been demonstrated and the project has been authorized for 11 years. Many other projects in the Missouri Basin have been authorized since and are now completed.

The Indian problem has just about been worked out. I urge this committee to appropriate money for Yellowtail.

Chairman HAYDEN. It is the Indian problem that has caused the difficulty up to now, but you say that is solved.

Representative METCALF. As far as I can see it is solved insofar as the tribal objection has been concerned. Individual objections are the same as individual objections of any one whose land is inundated by the construction of a dam.

Chairman HAYDEN. The project has the formal approval of the tribal council?

Representative METCALF. That is right, and that is something it has not had heretofore.

That completes my statement, Mr. Chairman.

Chairman HAYDEN. Thank you for your appearance.

Mr. Rising.

STATE WATER CONSERVATION BOARD OF MONTANA

STATEMENT OF E. W. RISING, REPRESENTATIVE

GENERAL STATEMENT

Mr. RISING. Thank you, Mr. Chairman. I have a prepared statement and statements of the Governor of the State of Montana, the Helena Valley Water Users Association, Water Users of Helena, Mont., the Lakeside Water Users Association, and the chambers of commerce of Billings and Hardin, Mont.

Chairman HAYDEN. All of those statements will be included in the record.

Mr. RISING. I am going to make my verbal statement as brief as possible.

I want to say that to begin with we support the appropriations that have been recommended by the Bureau of the Budget and as outlined in the second paragraph of my statement.

I am not going to discuss the individual items verbally with the exception of about three.

Congressman Metcalf has called attention already this morning to the need for the appropriation for the Helena Valley unit. That is one of the projects that was omitted in the House report, but was restored by the action of the House.

There is another item that I think is very important to have clarified. The budget request for investigation funds for the Bureau of Reclamation for the Missouri Basin was $2,500,000.

Later Assistant Secretary Aandahl sent a letter to the chairman of the House Appropriations Committee recommending that $2,825,000 of money originally planned for the lower Marias project be transferred to other projects. Included in that transfer was an item of $415,000 for investigations.

We understand that the House committee does not recognize that that $415,000 was appropriated by the action of the House last week and we urge that this committee take particular notice of that item and arrange for the transfer of the $2,825,000 to the various projects as recommended by Secretary Aandahl.

Chairman HAYDEN. You want us to make specific mention of that?

Mr. RISING. Yes. We in Montana would be benefited by an item of $90,000 out of that $415,000 for the investigation of what is known as the Beaverhead unit in the upper Missouri Basin and it is very necessary that that item be provided.

Of course, we are interested in having appropriation of $3,891,000 to complete the Tiber Dam. That is included in the budget and approved by House action.

I now will submit for the record my statement, a letter addressed to you, Mr. Chairman, by the president of the Helena Valley Water Users Association, a statement of Mr. W. A. Rossiter, chairman of the Water Users Irrigation Committee of Helena, Mont., the statement of the Lakeside Water Users Association of Helena, Mont., and a letter from Governor Aronson of Montana addressed to you.

We would like to submit that for the record.

Chairman HAYDEN. They will all be included in the record.

(The documents referred to follow:)

STATEMENT OF E. W. RISING

Mr. Chairman, my name is E. W. Rising. I am appearing as the representative of the State Water Conservation Board of Montana, the Billings and Hardin Chambers of Commerce and water users in Montana. I will support appropriation of items in the budget and H. R. 6766 for use of the Bureau of Reclamation for the fiscal year 1956, as follows:

Fort Peck project, Montana	$325,000
Drainage and minor construction	688,349
Rehabilitation, existing projects	2,125,000
Helena Valley (Missouri Basin)	3,000,000
Lower Marias (Missouri Basin)	3,675,000
Drainage and minor construction	522,000
Investigation, surveys, and advance planning:	
Original budget	2,500,000
Letter additional	415,000
	2,915,000

Fort Peck project, Montana, $325,000

In order to make power from Fort Peck available in quantities needed for irrigation pumping, REA's and other users at several points in Montana and North Dakota, funds are required to provide facilities as follows:

1. Installation of 15,000-kilovolt-ampere transformer bank at Glendive substation, estimated, $98,299.
2. Circuitbreaker at Dawson substation, $45,076.
3. Complete the installation of 30,000-kilovolt-ampere transformer bank at Williston, N. Dak. so that the 15,000-kilovolt-ampere transformers can be released for Glendive installation, $13,000.
4. Construction of 69-kilovolt line from Fort Peck to Whatley substation to permit delivery of power to Glasgow Airbase, $100,000.
5. Additions to Shelly substation to provide for delivery of power to REA, $50,000.
6. Metering equipment, $10,225.
7. Radio communication system, $10,000.

Drainage and minor construction, $688,349

Additional drainage facilities are now needed on the first and second divisions of the Buffalo Rapids project and on the Greenfield division of the Sun River project, with estimated cost of $320,000. This amount is included in item No. 35, $688,349, construction budget of the Bureau of Reclamation for fiscal year 1956.

The State Water Conservation Board of Montana believes both of the items listed above are essential and urges the committee to provide the funds requested and as listed in the budget and included in H. R. 6766 for the fiscal year 1956.

Rehabilitation, existing projects, $2,125,000

A rehabilitation and betterment program for existing irrigation projects was authorized by the act of October 7, 1949. Replacement of certain canal structures, widening of main canal where earth slides have occurred and pipeline improvements are needed on the Milk River project in Montana. This work would be done as a part of the program of the Bureau of Reclamation and is included in the estimate under item No. 36, $2,125,000, in budget for fiscal year 1956, and included in H. R. 6766.

Helena Valley (Missouri River Basin), $3,000,000

The need for this item was fully justified in the testimony of Mr. H. S. Hibbard, representative of Helena Valley Water Users, before the House Appropriations Committee and recorded at page 374, part 3, central section hearings on H. R. 6766. The State water conservation board approves the construction of the Helena Valley unit of the Missouri River Basin project and urges that the committee recommend the appropriation item as requested in the Bureau of Reclamation budget for fiscal year 1956.

I will also offer for the record a statement prepared by Mr. W. A. Rossiter, chairman, Water Users Irrigation Committee, Helena, Mont., a letter from Mr. John Baucus, president, Helena Valley Water Users Association, and a letter from the Lakeside Water Users Association, all urging that the Helena water item be appropriated.

Finally, I have a letter from Hon. J. Hugo Aronson, addressed to the chairman in support of an appropriation for the Helena Valley unit. I offer the letters for the record.

Lower Marias unit (Missouri River Basin), $3,891,000

Tiber Dam will be 80 percent completed by June 30, 1955. Additional funds are needed in amount of $3,675,000 to carry existing contracts on Tiber Dam through the fiscal year 1956. This item has been included in H. R. 6766.

Drainage and minor construction, $522,000

This item in the Missouri River Basin budget covers work in several States. Montana is interested in 1 item of $22,500 for drainage ditches required before lands are placed under irrigation on the Crow Creek unit of the Missouri River Basin project of the Bureau of Reclamation.

We particularly urge the committee to retain the item in appropriation bill for fiscal year 1956.

Investigations, surveys, and advance planning $2,915,000

This item as given in the Missouri River Basin budget is $2,500,000. Additional requirements, as covered by a letter addressed to Chairman Cannon of the House Appropriations Committee by Assistant Secretary Aandahl of the Department of the Interior, amount to $415,000. (See p. 275, pt. 1, central section hearings public works appropriation bill for 1956.) Total request, $2,915,000.

Montana is particularly interested in an item of $90,000 included in the $415,000 investigation item, covered in the letter of the Secretary of the Department of the Interior, to be used for completion of investigations on the East Bench unit, Beaverhead Valley. This is fully covered in the testimony of Mr. DeMar Taylor. (See pp. 376 to 380, House hearings, pt. 3, central section, public works appropriations for 1956.)

The State Water Conservation Board of Montana urges the retention of this item in the appropriation bill for fiscal year 1956.

Yellowtail Dam and Reservoir

I also call the attention of the committee to need for the appropriation of funds to begin the construction of Yellowtail Dam and Reservoir, a unit of the Missouri River Basin project. This unit was authorized in the Flood Control Act of 1944. Construction has been delayed principally because of demands for funds to construct other flood control, power, and irrigation units in the Missouri and Columbia Basins.

In April 1954, the House Committee on Interior and Insular Affairs, held a hearing for the purpose of reexamining the need and feasibility of the Yellowtail unit. At the conclusion of the hearing, the committee passed a resolution, excerpt as follows:

"*Resolved*, That the Committee on Interior and Insular Affairs of the House of Representatives recommends that the Yellowtail and Hardin units of the Missouri River Basin project be immediately programed for construction; and be it further

"*Resolved*, That a copy of this resolution be transmitted to the Director, Bureau of the Budget, the Secretary of the Interior, and the chairman of the House Appropriations Committee.

"Approved by the Committee on Interior and Insular Affairs of the United States House of Representatives this 4th day of May 1954." (For complete copy of resolution, see pp. 510 and 511, pt. 3, Central Section, Hearings on Public Works Appropriations for 1956.)

In compliance with the resolution, the Interior Department prepared a budget request for $5 million for the fiscal year 1956, for the purpose of beginning the construction of Yellowtail Dam. When the item did not appear in the budget of the United States, submitted to the Congress last January, letters and telegrams were addressed to the Bureau of the Budget and the President, making inquiry as to the reasons for the omission of the Yellowtail item.

On January 27, 1955, Donald M. Belcher, Assistant Director of the Bureau of the Budget, in a letter to the Billings, Mont., Chamber of Commerce, pointed out two considerations which resulted in this project not being included:

"(1) The fact that, in our judgment, the possibility of a satisfactory partnership arrangement for local participation in this project had not been fully considered, and

"(2) The fact that our review of the Yellowtail project as presently contemplated indicated that to provide for the repayment of the power investment would require power rates higher than those now prevailing in the area."

At the hearing on March 23, 1955, before the Subcommittee on Irrigation and Reclamation, of the Committee on Interior and Insular Affairs of the Senate, witnesses for the Department of the Interior confirmed the feasibility of the Yellowtail and Hardin units, and stated that power could be sold in the marketing area at rates necessary to repay the power investment. I quote from the hearing record as follows:

Under Secretary Clarence A. Davis, Department of the Interior, said:

"* * * I am sure the chairman knows this project has been worked up and examined by the Bureau of Reclamation who have found it feasible both physically and financially, and there have been extensive hearings before the committee (House) last year in which Mr. Clinton and other members of the Bureau of Reclamation have elaborately discussed all of the details of the plan, and the position of the Department is favorable to it."

Commissioner W. A. Dexheimer of the Bureau of Reclamation, in his testimony at the hearing on March 23, 1955, said:

"Mr. Chairman, members of the committee, we have as the committee knows, pushed for the Yellowtail Dam and the Hardin irrigation project for some time, hoping to get in under construction. * * * We think the project is entirely feasible and that the power under the present plan can be sold as we propose that it will be done, and that the project will be economically sound."

Also, at the hearing before the Senate committee on March 23, 1955, Mr. F. M. Clinton, regional director, region 6, Bureau of Reclamation, presented a statement giving in detail the present plan for the Yellowtail unit, construction cost analysis, and justification for allocation of costs to various purposes. Mr. Clinton's final statement is as follows:

"CONCLUSION

"The above analysis demonstrates that the Yellowtail unit is economically and financially feasible under the approved interim schedules of rates for power service in the Missouri River Basin project."

The same "conclusion" was repeated at the Senate hearing by Mr. J. R. Walker, supervisor of power, region 6, Bureau of Reclamation, who placed in the record tables showing that it is entirely feasible for the Department of the Interior to sell Yellowtail firm commercial power in the Missouri River Basin at 5.5 mills and at the same time charge 13.8 mills for peaking power.

I present for the information of this committee a printed copy of the record of the hearing on Yellowtail Dam and Hardin unit, Montana, before the Subcommittee on Irrigation and Reclamation, United States Senate, March 23, 1955.

I submit for the record a copy of the resolution passed by the committee June 16, 1955. I call the particular attention of the committee to the final paragraph of the resolution.

"Be it further resolved that the Senate Appropriations Committee be advised of this action by a copy of this resolution to the end that suitable steps be taken to place Yellowtail Dam and the Hardin irrigation unit under construction in fiscal year 1956."

The Montana Power and the Pacific Power & Light Co. have offered a partnership plan to the Department of the Interior. We feel that this should not delay an appropriation and the beginning of construction as the dam, whether the project is constructed under the Government or partnership plan is to be entirely constructed by the Bureau of Reclamation. Providing funds in the appropriation bill for fiscal year 1956 will permit beginning construction while at the same time continuing negotiations with the power companies relative to a partnership arrangement. However, should these negotiations fail and the Government decide to make the power installation and build the transmission facilities, then we will not have lost a year's time. Therefore, Mr. Chairman, I urge that the committee recommend the appropriation of $5 million at this time for beginning the construction of the Yellowtail unit of the Missouri River Basin project.

Mr. Chairman, I thank you for the opportunity of presenting our views regarding appropriation items needed for Montana projects for fiscal year 1956.

E. W. RISING.

HELENA VALLEY WATER USERS ASSOCIATION,
Helena, Mont., June 14, 1955.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
United States Senate, Washington, D. C.

DEAR SENATOR HAYDEN: I am writing you this letter to add our plea, along with the others, for the Helena Valley irrigation project.

We have worked hard and sincerely for this project and feel that it is a necessity and that, because of the physical condition of the present facilities, we are in dire need of your assistance.

Thanking you for past favors and hoping that you can see your way clear to come to our rescue in connection with appropriations for this project, I am

Yours sincerely,

JOHN BAUCUS, *President.*

STATEMENT OF W. A. ROSSITER, CHAIRMAN, WATER USERS IRRIGATION COMMITTEE, HELENA VALLEY UNIT, MISSOURI RIVER BASIN PROJECT

Mr. Chairman and members of the Appropriations Committee, we are making a plea to you at this time for construction funds for the Helena Valley Unit. Bringing this to its present position has taken several years of hard work, necessitating several trips to Washington by interested parties. We, who have been pressing for this unit, have been under continued pressure by reason of the fact that, always in the background has been the knowledge that some time or other, within the not too distant future, a catastrophe might overtake the major irrigated portion of the Helena Valley by reason of failure of the present pumping units; these units being almost 50 years old, without any major replacements, have long been past the ordinary period of usefulness and are, therefore, operating on that little margin of safety which might have been manufactured into motors and pumps 50 years ago.

Under these conditions, of course, the commencement of each farming year is an extreme gamble and that is the reason we are taking for requesting construction funds at this time, as we have got to take this gamble for 4 or 5 years more before the new system can be in operation. In certain portions, under the present system, the operating costs are so high that only under the most favorable crop conditions and price conditions can the cost be met.

While the State water conservation board has done a good job of keeping the present system going, any major item of cost of repair could very easily take it out of their budget appropriations to the point where they could not meet and overcome the emergency. Days, weeks, and months have been spent working out the various possibilities for a solution of the dilemma in which the people of Helena Valley find themselves and, after a thorough canvas of our solutions, the present proposed one offers the only prospects for a permanent solution.

Proceedings were temporarily delayed last fall while terms of a draft of repayment contract were worked out between the Bureau of Reclamation and water-user representatives. In the long run, this should speed things up; however, because the draft of repayment contract was explained fully in connection with formation of the irrigation district and the general obligations to be assumed by the proposed district are known to all concerned.

Hearings for formation of the irrigation district were completed on June 3. The attorneys were allowed 20 days to file briefs. All statutory requirements of Montana law were met so formation of the district should follow as a matter of course by early July. Objectors numbered only 15 at the hearing for district formation out of a total of 160 landowners in the proposed district. With the exception of 3 or 4 landowners who had acquired additional water rights since studies were made, involving some 100 or 150 acres, no reduction of the original area of the proposed district is anticipated.

Under terms of Montana law landowners of the proposed district petition the district commissioners to execute the repayment contract with the Government In view of the fact that the draft of contract has been available throughout discussions for the negotiation of the irrigation district, this will only be a formality. The committee expects matters to be completed early in September, with formal execution of the contract at that time. Under the contract the district guarantees to pay operation and maintenance costs for the entire project area estimated at $3.80 per irrigable acre and, in addition, will pay $1.60 per irrigable acre on construction costs. This means all returns from sale of water by the Government to

about 4,600 acres requiring supplemental water will accrue to the Government to apply on construction costs. No distribution works other than turnouts from the main canal into present ditches or streams are being constructed for these lands.

In view of the fact that construction of the tunnel and manufacture of pumping-plant equipment are each expected to require 2 years, it is highly important that work get underway as soon as possible. With this in mind, start of actual construction on the tunnel and award of contracts for pumping-plant equipment have been scheduled on the basis of anticipating execution of the repayment contract in order that construction work can proceed immediately thereafter. In this manner, a highly critical year of construction time can be saved as work on the tunnel can proceed throughout the winter months. Pumping-plant equipment will be ready to install when needed. Even with this program, it will be the spring of 1958 before the first area of the project can receive water. Fortunately, the first water will be available to the area most in need of it.

In view of the above facts we, therefore, urge the committee to approve start of actual construction for Helena Valley unit of the Missouri River Basin project in fiscal year 1956, through appropriation of $3 million, use of which will, of course, be subject to our execution of the repayment contract.

LAKESIDE WATER USERS ASSOCIATION,
Helena, Mont., June 14, 1955.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
United States Senate, Washington, D. C.

DEAR SENATOR HAYDEN: Our association, of course, is one of the recipients of the benefits to be derived from the Helena Valley irrigation project. We have been hanging on by the skin of our teeth for these past several years and our position, insofar as maintaining a district and keeping the present system going, gets more precarious. As a result, we are vitally interested in seeing the Helena Valley unit started this year.

I have spent a great deal of time and effort in assisting to meet the requirements of Congress as to getting a repayment contract ready and we believe that we are in a position to guarantee this being done in sufficient time that there will be plenty of construction season left.

We would greatly appreciate any assistance you can give us to have construction appropriation money provided for the Helena Valley irrigation project in the present Reclamation budget.

Yours sincerely,

AL HRELLA, *Secretary-Treasurer.*

STATE OF MONTANA,
OFFICER OF THE GOVERNOR,
Helena, June 14, 1955.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
Senate Office Building, Washington, D. C.

DEAR SENATOR HAYDEN: I note that funds have been provided by the House of Representatives for construction of the Helena Valley unit. I hope your committee will give consideration to the serious situation which confronts the farmers in the Helena Valley. An inadequate supply of water is being furnished some of these water users by an antiquated pumping system over 50 years old, and others are depending on irrigation water from side streams with only a partial supply.

Facilities were installed in the Canyon Ferry Dam to irrigate this particular area, as it was planned as one of the multipurpose uses of that project. Our State water conservation board temporarily assumed the operation of these aged pumping plants in 1946 with the understanding that the Bureau of Reclamation would proceed to furnish new irrigation facilities for the area. Failure of the present worn out pumping system is a very real problem because such an event would mean disaster to a large group of families, a liability which this State is not in a position to assume.

The proceedings to form the necessary irrigation district are well along and a repayment contract should be executed by September 1. Bureau officials advise me that bids can be called for so that an award could be made immediately after completion of the repayment contract. Work on the tunnel could be carried on

during this next winter, and an early award would facilitate the ordering of the necessary pumping equipment, thus avoiding future delays.

I sincerely urge that the importance of this matter be recognized and that funds will be made available so that construction of the Helena Valley unit may proceed without further delay.

With kindest regards, I am,

Yours sincerely,

J. HUGO ARONSON, *Governor.*

YELLOWTAIL DAM AND HARDIN UNIT

Mr. RISING. Mr. Chairman, I want to bring to your attention a report which has just been issued by the Subcommittee on Irrigation and Reclamation of the Interior and Insular Affairs Committee of the Senate on the Yellowtail Dam and Hardin unit of the Missouri River Basin project.

Chairman HAYDEN. That report relates to a resolution now pending on the Senate Calendar?

Mr. RISING. It does. And at this time I wish to submit for the record a copy of the resolution.

Chairman HAYDEN. Those have been included in the record.

Mr. RISING. All right. Thank you.

PREPARED STATEMENT

I have also the statement of Mr. J. Carter Johnson, chairman of the water resources and Yellowtail Dam committee of the Billings, Mont., Chamber of Commerce, which I submit for the record.

(The statement referred to follows:)

STATEMENT OF J. CARTER JOHNSON, BILLINGS, MONT.

Mr. Chairman, my name is J. Carter Johnson.

I am chairman of the water resources and Yellowtail Dam committee of the Billings, Mont., Chamber of Commerce.

I am presenting a statement for the purpose of supporting the request for an appropriation for the purpose of enabling the Bureau of Reclamation to resume the construction of the Yellowtail-Hardin units of the Missouri River Basin development.

About 38 years ago a company was organized to further the Yellowtail project. A permit was obtained from the Government, surveys were made and complete engineering data assembled. This work was subsequently checked and approved by Hugh L. Cooper, noted waterpower engineer, and Gen. George W. Goethals, but various factors combined to prevent further progress.

Under the Flood Control Act of 1944, the Yellowtail unit (formerly referred to as Big Horn Dam) as a unit of the Missouri River Basin project was authorized.

The Yellowtail Dam site is located some 43 miles south and west of Hardin, Mont. It is easily accessible by a fairly good water grade highway, much of which is oil surfaced.

No where has God provided man with a better, more ideal place on which to build such a structure. There are no roads, railroad beds, cities, or tillable lands that will be submerged. Every dollar expended can be used to further the dam construction, and no land of tillable value will be lost—to be replaced by other lands made irrigable by the dam's waters.

Since the Yellowtail project was first conceived, the importance of controlling flood waters and silt deposits, at or near their source, in order to prevent damage to the large reservoirs on the main stems of the Missouri and industrial properties of the Missouri and Mississippi Basin has been recognized.

At the present time, the power shortage is acute in northern Wyoming, and this location is ideally situated for transmission with a minimum loss of line drop. We must also keep in mind that the largest chrome deposit in America is less than 100 miles from this dam site. Should war occur this will become almost a must in national defense.

We have overcome every objection that has been raised regarding construction of Yellowtail Dam. We have secured partnership investors at the request of the Bureau of the Budget. These partners, if Congress should decide to approve such arrangement, are willing to invest $50 million in power facilities. We have also secured the recommendations of the Irrigation and Reclamation Committees of the House and Senate, for a prompt start on construction of Yellowtail Dam. These recommendations were made after hearings by the House in April 1954 and the Senate in March 1955.

The local interest in the Yellowtail and Hardin units is very pronounced as was evidenced by some 700 wires and letters to the President of the United States immediately the people were informed that an item for the Yellowtail Dam had not been included in the 1956 budget to Congress.

It is planned that water conserved in Yellowtail Reservoir will be for the irrigation of 46,000 acres of land now dry farmed, and located a few miles below the reservoir. Also when low-cost power is available for pumping, the Bureau of Reclamation plans to provide irrigation for 35,000 acres on bench lands farther downstream in the Big Horn and Yellowstone Basins.

We of the Midland Empire (eastern Montana and northern Wyoming) consider the construction of Yellowtail Dam of utmost importance to our economic well-being. With the rapid growth of the oil industry in the area and the mechanization of agriculture, and so forth, the demand on all manufactured commodities is on the increase, electric energy being near the top of the list.

The expenditure of some $2,500,000 already put forth in mapping, testing, and general preparation for construction is a visual and actual proof that the Bureau of Reclamation and its engineers have in the past, and do now, consider the Yellowtail project a feasible, sensible undertaking, and that it is basically sound, from the standpoint of economics.

We are now asking the approval of an appropriation to continue this most important project.

The Bureau of Reclamation has asked for $5 million to start work and this, we feel, is justified.

TELEGRAM

Mr. RISING. I have received a telegram addressed to you in my care, Mr. Chairman, from the president of the Big Horn County Chamber of Commerce, Hardin, Mont., which I would like to submit for the record.

(The telegram referred to follows:)

HARDIN, MONT., *June 18, 1955.*

Hon. CARL HAYDEN,
Care E. W. Rising 1215 16th Street NW.
Chairman, Senate Appropriations Committee:

Re Yellowtail Dam and Hardin units of Missouri River Basin project. This area in full accord of resolution adopted by Senate Interior subcommittee on irrigation and reclamation made public June 17, 1955, by Montana Senators Murray and Mansfield and Congressman Metcalf. Your favorable consideration is urgently needed for the future economy and prosperity of Montana and Wyoming as brought out and reemphasized by numerous congressional hearings since the authorization of this project in 1944.

HENRY S. RUEGAMER,
President, Big Horn County Chamber of Commerce.

EXCERPT FROM CONGRESSIONAL RECORD

Mr. RISING. I have also a statement by the Honorable Mike Mansfield in the Congressional Record of June 17, 1955, which I submit for the record.

(The document referred to follows:)

[Statement of Hon. Mike Mansfield, Congressional Record, June 17, 1955]

CONSTRUCTION OF YELLOWTAIL DAM

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the Record a statement prepared by me on the action taken yesterday by the Subcommittee on Irrigation and Reclamation of the Senate Committee on Interior and Insular Affairs relative to the construction of Yellowtail Dam.

(There being no objection, the statement was ordered to be printed in the Record, as follows:)

STATEMENT BY SENATOR MANSFIELD

YELLOWTAIL DAM

The Senate Interior Subcommittee on Irrigation and Reclamation yesterday recommended "an appropriation to initiate immediate construction of Yellowtail Dam, with provision for later installation of power-generating facilities, and the construction of the Hardin irrigation unit."

The subcommittee resolution, unanimously recommended by the Senator from New Mexico [Mr. Anderson], the Senator from Wyoming [Mr. O'Mahoney], and the Senator from Colorado [Mr. Millikin], is another constructive step toward construction of this vital multipurpose project in the Northwest. When completed, Yellowtail Dam will provide needed power, flood control, and irrigation.

This subcommittee action is similar to action taken by the House Interior Committee last year, that the dam be constructed under its Federal authorization.

In addition the subcommittee resolution called for continued discussion between the Secretary of Interior and the interested private power companies "with a view of advising the subcommittee * * * so that the initiation of the construction of Yellowtail Dam will not be delayed, pending evaluation of any 'partnership' approach." The subcommittee also asked the Secretary of Interior to continue land right-of-way negotiations with the Crow Indian Tribe.

The next step is an appropriation to get construction underway. The public-works appropriation bill for fiscal year 1956 is now being considered by the House of Representatives. In view of the fact that the bill has not been acted upon by the Senate, the senior Senator from Montana [Mr. Murray] and myself strongly urge that these recommendations be carried out and that an appropriation be granted to begin construction on Yellowtail Dam in the next fiscal year. I also wish to make note of the fact that the Bureau of Reclamation included a $5 million request in its program for fiscal year 1956, but it was denied by the Bureau of the Budget.

A new start in our power program in the Northwest has been long overdue; Yellowtail Dam will be a great contribution to meet our power shortage in America.

RESOLUTION

Mr. RISING. I will conclude my statement, Mr. Chairman, by calling attention to the resolution again that was adopted by the Interior and Insular Affairs Committee of the Senate, which recommends that the Yellowtail and Hardin units of the Missouri River Basin project be immediately programed for construction, and they ask that this particular resolution be particularly called to the attention of the Senate Committee on Appropriations.

Chairman HAYDEN. That resolution is already a part of the record.

Mr. RISING. Thank you very much, Mr. Chairman, for allowing me to testify this morning

Chairman HAYDEN. I am compelled to go to the floor now, and I think we could finish up without difficulty if we reconvene at 2:30.

The subcommittee will stand in recess until 2:30 this afternoon.

(Whereupon, at 12:20 p. m., a recess was taken until 2:30 p. m., this same day.)

AFTERNOON SESSION, 2:35 P. M.

Chairman HAYDEN. Mr. Clifford Tabor.
Do you want to tell us about the Palo Verde project?

PALO VERDE IRRIGATION DISTRICT, BLYTHE, CALIFORNIA

STATEMENT OF CLIFFORD C. TABOR, ENGINEER

PALO VERDE PROJECT

Mr. TABOR. Very briefly, sir.
Chairman HAYDEN. All right.
Mr. TABOR. My name is C. C. Tabor, and I am engineer of the Palo Verde Irrigation District, Blythe, Calif. I wish to appear in the support of the item of $1,985,000 for the fiscal year's construction on the Palo Verde Dam and the levee and drainage system on the Indian reservation on the Arizona side. The total cost is $7,100,000.
Chairman HAYDEN. The House allowed the amount in full. And you would like to have us sustain the action taken by the House?
Mr. TABOR. That is right, sir. And I would like to file a statement.

CHANNELIZING RIVER NEAR NEEDLES

Chairman HAYDEN. Let me ask you about the drainage conditions at the lower end of the Palo Verde project. It has been suggested that it is going to be necessary to channelize the river down there to stabilize those conditions.
Mr. TABOR. Yes, sir.
Chairman HAYDEN. We have a request to put money in this bill to finish channelizing the river up in the vicinity of Needles, at the big dredge up there. Would it be advisable to have that job done and move the dredge down below?
Mr. TABOR. Yes, sir; it would. That was one of the reasons given for the appropriation for the dredge, itself, in 1949. Money was appropriated on the basis that the dredge was needed at Needles and also in the valley south of the Palo Verde Valley.
Chairman HAYDEN. We have several requests from interested parties from Arizona, Nevada and California that the dredge be rehabilitated in connection with the work there. There is real need for it below, in your judgment?
Mr. TABOR. Yes, sir.
Chairman HAYDEN. Thank you.

PREPARED STATEMENT

Mr. TABOR. Thank you, Mr. Chairman. If I may, I will leave this statement for the record.
(The statement referred to follows:)

REVISED AND EXTENDED REMARKS OF C. C. TABOR, ENGINEER, PALO VERDE IRRIGATION DISTRICT, BLYTHE, CALIF., IN SUPPORT OF ITEM OF $1,985,000 FOR CONSTRUCTION OF PALO VERDE DIVERSION DAM

Diversion from the Colorado River to the Palo Verde Valley started in 1877, which gives this locality the oldest water right in California on the Colorado River. Diversions have been continuous since 1908 and, until about 1942, were by gravity. Following construction of upstream dams, Hoover Dam (1935), Parker Dam (1938), and Headgate Rock Dam (1942), the stream bed and water surface lowered so that the district could no longer divert all its needs by gravity. This lowering was caused by the silt in the stream bed moving on downstream and not being replenished by the silt from upstream which was impounded by the dams. In 1945, the Federal Government constructed a loose-rock weir in the river to hold the water sufficiently high for gravity diversion. The Federal Government has appropriated approximately $25,000 every year for maintenance of this temporary weir. Last year, after 9 years of studies and negotiations, the 83d Congress passed a bill, H. R. 8498, authorizing construction of a permanent dam to assist in the solution of this problem. The solution is a negotiated settlement and is not entirely to the district's liking; for example, the proposed dam will hold the water some 4 feet lower than the present weir. This elevation was necessary as a compromise with the Bureau of Indian Affairs to prevent flood hazard and waterlogging on the Colorado River reservation on the east side of the river. The estimated cost is $7,099,000 divided as follows:

Dam, spillway and intake	$4,538,000
Levees and drain on Indian Reservation	2,061,000
Loan to district for modification of canals to fit lower level	500,000
Total	7,099,000

Of this amount, the district is to pay $1,175,000 (an amount of $675,000 as determined by the Department of Interior, plus $500,000 added by the Senate) plus the $500,000 loan, a total of $1,675,000. This is to be paid in 50 years without interest.

The district is willing to enter into a contract with the United States for payment of these amounts and to operate the dam at the district's expense.

The district is not a reclamation project; it has stood on its own feet financially. It accepted some Federal flood control work, (less than $50,000) in 1932–35 and accepted the weir ($250,000) in 1945. No new land will be added to cultivation as a result of the proposed dam.

The district also requests the committee to include in the 1956 budget the usual item of $25,000 for maintenance of the weir. This temporary structure must be maintained until the new one is complete.

WASHINGTON STATE COLUMBIA BASIN COMMISSION

STATEMENT OF HUBERT H. WALTER, ADMINISTRATIVE ASSISTANT

COLUMBIA BASIN PROJECT

Chairman HAYDEN. Mr. Walter?

Mr. WALTER. Thank you very much, Mr. Chairman.

I would like to present this prepared statement and speak very briefly on several of the phases of this project.

Chairman HAYDEN. Your statement will be printed in full in the record.

Mr. WALTER. Thank you very much.

I am with the Columbia Basin Commission. We have appeared before your committee numerous times, and you probably know as much about the project as I do, notwithstanding that I live with it about 7 and 8 days a week.

But I am appearing in behalf of the 12½ million for the Columbia Basin project, 3 million for the Kennewick project, and $631,000 for

the Foster Creek unit of the Chief Joseph project, all of which are recommended by the Budget.

Chairman HAYDEN. And allowed by the House?

Mr. WALTER. And allowed by the House, yes; plus the fact that we would like to have $386,000 to begin work on the Roza powerplant, which has been approved, is in the contract, and is a part of the project. That was not in the budget.

We are asking for these appropriations strictly and wholly and solely on the fact that we need the money to keep the projects on schedule, and it is good business.

Now, we are, on the Columbia River Basin, on the third year of water from behind Coulee Dam. The Government has invested in that about $478 million, and we have returned to the Government $108 million. We have had direct repayment through power and water users.

It is estimated that this will cost eventually $778 million. But we feel that we are now at the point where the Government has made its net investment. We have power revenues and other revenues, more than a million dollars a month. Our land is profitable. Our income taxes, that is, income taxes from within the boundaries of the Columbia River Basin project, have grown from $4 million in 1936, the first year that the irrigation features were started, to over $16 million in 1953. Our crop returns have grown from nothing before 1952 to $4 million in 1952 and $16 million in 1954. It is a good paying project. We are paying our way. We are ahead of our repayment schedule.

We feel it is just good business to go ahead with this; plus the fact that the demand for land is as terrific now as it ever was. In the last sale of land, Government sale of land, to veterans, 46 tracts were offered for sale, and there were over 3,600 applications.

So our demand is terrific. And we believe that it is necessary to keep that on schedule, because we in the State of Washington have invested, from business, industry, and our local governmental agencies, more than $125 million for roads, schools, businesses, and others. And not only for the people who are there, but for the people who are yet to come, in the fact that we had this adopted schedule of from 50 to 60 thousand acres per year coming in, until 1962.

So we have invested with the expectation that that program would be maintained. And it will be maintained with the $12½ million dollar appropriation which was recommended in the budget and approved by the House.

KENNEWICK UNIT OF YAKIMA PROJECT

Now, we ask, too, that the $3 million budget for the Kennewick unit of the Yakima project be retained, because that will in substance complete the Kennewick project, and with the completion of that there is the completion of the entire Yakima project, which is one of the most successful projects that has ever been undertaken. So our project there will be complete with that.

We were asking for $631,000 to begin work on the Foster Creek unit of the Chief Joseph project. That is an area in north central Washington adapted for fruit and high return crops. And there are no surpluses in apples. Apples will be the main crop. We think it is feasible. It is feasible, and it is authorized. And we would like to have the start of work on that.

We are in the process now of organizing the districts. And I talked to them yesterday by telephone, and in the Bridgeport area there are only three landowners yet to sign up. They have agreed to do that, but they were away from the area at the time. We believe it is some of the best fruit land in the West. And we in the State of Washington have been the most successful, or we feel we have been the most successful, reclamation and irrigation area, in the country, because we on the Yakima project were the first to repay in full the Government's investment in reclamation, and we paid that off ahead of schedule.

Those three projects are in the budget. We would like to have those maintained. And we can keep on schedule, and we are settling our land faster than any other reclamation project in history.

YAKIMA PROJECT CROPS

Chairman HAYDEN. I wanted to ask you this about the Yakima reclamation project. What kind of crops did they put in the first year?

Mr. WALTER. We are faced with the prospect of going into row crops, cash crops. We have to. Because we have young people, mainly veterans. It is a young man's job, this job of developing this land. We are taking it from sagebrush into farms. They have to have that first year's cash crop insofar as possible in order to get their feet on the ground financially.

Chairman HAYDEN. What is the cash crop that they are growing?

Mr. WALTER. Mainly beans, dried beans. We have dried peas, and some potatoes.

Chairman HAYDEN. Is the market good for those products?

Mr. WALTER. Beans are under support. Our Red Mexicans—I will just speak for my own self—we had no trouble selling on the open market last year. Some of our pintos were on Government loans. But the Red Mexicans, yes. There is not a great surplus. There are beans in storage now, but not a great surplus. Our spuds, our potatoes, sold on the open market, and most of our other crops.

And then for the second year, although we are curtailed on our wheat—and furthermore, wheat is not a good reclamation project, but we grow that 15 acres, and most of us are doing like we are doing, putting in the maximum amount of wheat we can, harvesting it, and letting it go into alfalfa for a few years.

CONDITION OF SOIL

Chairman HAYDEN. Our experience in the Southwest is that you cannot grow anything very much until you get some humus in the soil. And, of course, the best way to do that is to put in alfalfa.

Mr. WALTER. I agree with you, Mr. Chairman, that we do need humus in our soils out there. But notwithstanding that, our row crops have averaged $150 an acre return.

Chairman HAYDEN. Do you have to fertilize very heavily?

Mr. WALTER. We fertilize heavily, yes; until we get the crops in there. The soil is lacking in nitrogen, mainly nitrogen, although zinc is important in a lot of our crops.

So we put on from 100 to 150 pounds of fertilizer to start out with.

So we do have to fertilize heavily, but when we get our row crops and legumes in there, it is going to be not such a problem.

Chairman HAYDEN. We found that by heavy fertilization you could take raw desert land and plant a crop and get two bales. But it takes a lot of fertilizer.

Mr. WALTER. It takes us that. We do fertilize heavily. On our beans on heavy fertilization, we get up to 30 to 35, and in some cases 40, 100-pound sacks per acre. We do get good crops on that.

Chairman HAYDEN. Mexican Reds? Is that what the Mexicans call a frijole bean?

Mr. WALTER. I think it is; yes. We just call them Mexican Reds. Frankly, I guess they are a kidney bean, but Mexican Reds are the only name we know them by.

Chairman HAYDEN. The frijole is a staple diet in Mexico.

Mr. WALTER. Our greatest market is in the Latin American countries.

The Roza powerplant is not in the budget. We feel that it should be. The head of the Roza Irrigation District, Mr. Miller, is here and we will speak briefly on that, with your tolerance.

Thank you very much for this opportunity, Mr. Chairman.

PREPARED STATEMENT

(The statement referred to follows:)

STATEMENT OF HUBERT H. WALTER OF THE WASHINGTON STATE COLUMBIA BASIN COMMISSION IN BEHALF OF APPROPRIATIONS FOR THE COLUMBIA BASIN PROJECT, THE KENNEWICK UNIT OF THE YAKIMA PROJECT, THE FOSTER CREEK UNIT OF THE CHIEF JOSEPH PROJECT, AND THE POWERPLANT OF THE ROZA PROJECT IN THE YAKIMA VALLEY

My name is Hubert H. Walter and I am the administrative assistant of the Washington State Columbia Basin Commission, a State agency charged with resource development, particularly as it applies to reclamation and to agriculture.

We ask that the budget requests of $12,500,000 for the Columbia Basin project, $3 million for the Kennewick unit of the Yakima project, and $631,000 for the Foster Creek unit of the Chief Joseph project be approved, plus the addition of $386,000 to start construction on the Roza powerplant. All of these projects have the unanimous support of the Columbia Basin Commission.

We ask these appropriations on the basis that it is good business to go ahead with these projects.

Any reductions would cause serious hardships on the area. For every year of delay, there would be a cut in the earning capacity of our project.

The owners of presently undeveloped lands would suffer because they have planned and invested on the reasonable assurance their lands would receive water on schedule—that is, the rate of development schedule that was adopted years ago by the water users, the Bureau of Reclamation, and Congress itself.

Then, too, there have been business and industrial investments made which also will suffer if the agricultural progress is delayed.

On the Columbia Basin project we have progressed far enough and have enough land under production and enough power generation to prove the economical, agricultural, and financial stability of this reclamation undertaking. There can be no question of the productiveness of the lands, which stood barren for centuries, and of the project's ability to repay the Government in full for the investment in this reclamation development, providing the construction work goes ahead.

Our repayment record seems to us to be proof that the Government will get its money back. So far, the investment amounts to just under $500 million but the project has returned to the Government in direct payments $108 million, to say nothing of the millions of dollars that have been added to the Federal Treasury in income taxes as a direct result of the creation of new wealth which has come from this project, notwithstanding the fact that we have been irrigating with waters from behind Grand Coulee Dam for only 3 years.

The Government is near the point where its net investment will have been made. We are returning to the Government $1 million a month from project revenues,

and we are asking for $12,500,000 for the next fiscal year. This project will cost at completion $775 million, but the net investment by the Government, in the opinion of our economists, should never exceed $500 million and that investment for all practical purposes has been made.

Public and private sources have invested or made available for investment more than $125 million since 1946, the first year of construction work on the irrigation features. We have spent $8 million for farm-to-market roads, and the last legislature made another $4,300,000 available to assure that the road building program be kept abreast of irrigation development. Schools have spent $8,950,000 for new facilities. Civic expenditures have reached $5,466,000 since 1946. Other expenditures by private individuals include $54,800,000 for residential and commercial buildings and facilities, $28,400,000 for farms and farm machinery, and $12 million for industrial development.

All of these expenditures were made in anticipation of continued and orderly development of the basin, and unless that is carried forward, the investments will be in jeopardy.

The Government's additional benefits are shown by the income-tax payments by people on the basin, which have climbed from $5,365,000 in 1946, the first year that work was started on the project, to $16,418,000 in 1953. Sales taxes in the same period went from $748,000 in 1946 to $2,131,000 in 1953. Gross crop returns from Columbia Basin lands went from $4,686,885 in 1952 to $9,081,887 in 1953, and to $16,253,000 in 1954. It is expected that by 1961, when 600,000 acres will be under water, the crop returns will amount to $81 million and livestock production will add another $61 million annually.

The demand for land on the Columbia Basin has not lessened. People are combing the basin in search of land that can be purchased. Government-owned lands on the project are sold to veterans on a priority basis, determined by lottery, and in the last sale in which 48 tracts were offered, there were 3,600 applications for them.

Approval of the $3 million request for the Kennewick unit will virtually assure the completion of the Kennewick unit of the Yakima project and bring another 15,000 to 17,000 acres of land into crops. This is the last unit of the Yakima project and with the completion of this, the entire project will be finished. The success of the Yakima project has been proven by the prosperity of the area, but even greater proof is that it was in this project where units first returned to the Government the full investments in reclamation development. The Tieton and the Sunnyside units of the Yakima project were the first in history to repay in full and they did so ahead of the due date. The Kennewick unit is in an area of unusual development where the population has multiplied several times in recent years. Markets for crops grown on this unit will be found near home.

We respectfully request, too, that the $631,000 item for the Foster Creek unit be granted. This is a new project in north central Washington and will serve some of the finest fruit lands in the West. The total cost of this is under $5 million, and it would enhance the economy of the area many times that figure.

Construction of the powerplant of the Roza project should be started because it would reduce the power costs to water users and furnish a new source of power for general usage in an area where a power shortage looms for the near future. The Government agreed in its contract with the water users to build this plant, and work on it should be started immediately. The total cost of the plant is under $3 million. Its feasibility has been established, and it must be constructed for the Government to recover moneys already spent for the power features.

The State of Washington has an outstanding reclamation record of production and repayment. Still, we stand 13th among the reclamation States in acres reclaimed. Our population has increased 48 percent since 1948 and our agricultural advancement has not kept pace.

We respectfully urge that $12,500,000 for the Columbia Basin, $3 million for the Kennewick unit, $631,000 for Foster Creek, and $386,000 for the Roza powerplant be allotted.

ROZA IRRIGATION DISTRICT

STATEMENT OF H. LLOYD MILLER, PRESIDENT

ROZA POWERPLANT

Chairman HAYDEN. Mr. Miller?

Mr. MILLER. I am H. Lloyd Miller, member of the Columbia Basin Commission and president of the Roza Irrigation District of the Yakima project.

I am here primarily in the interest of our Roza Irrigation District's powerplant. This district was formed in about 1919 or 1920 under the name of the Yakima-Benton Irrigation District, because it took in two counties. Now it has been changed, and it means the same thing. It is the Roza.

I don't know that it is necessary for me to take a lot of time to read this. If you would like me to, I will read it and discuss it as I go.

Chairman HAYDEN. You may insert the entire statement in the record and highlight it if you care to.

Mr. MILLER. The entire statement, then, is in the record. But here are the facts.

When we signed the first contract, I believe in about 1935, the powerplant was included. That is a contract with the Government, repayment and everything.

Along came the first war, and they wanted to get production, and the board of directors agreed to forego the power feature at the time if they would build it afterward. And the critical materials kept us from doing it. And along came the second war, and we did the same thing. And now we are without it, and we need it.

Chairman HAYDEN. How long will it take to build this powerplant?

Mr. MILLER. We have spent about $3 million on it already.

Chairman HAYDEN. When do you expect to get the first power, if you keep at it, now?

Mr. MILLER. Well, I will tell you. Our costs consist of building a larger tunnel, which was over a million dollars, and then more storage and more other facilities, until we have nearly $3 million invested. And all there is to do is set in the machinery, you might say. It is all ready to go. And we have a deal, which is recited in this brief here, with Bonneville Power. We negotiate every 5 years. We can get out of it at any time. We use their power now, which costs us more than we could produce our own power for, and this powerplant is a part of the project. We have never been able to get it in the budget, for some reason or other, but now we would like to see it built.

Chairman HAYDEN. How long will it take, if we proceed with the work, before you can actually produce power?

TOTAL COST OF PLANT

Mr. WALTER. We could have that within a very short time. Now, the cost of this plant would be less than $3 million, about $2,700,000. We could start work on this and have power in there within 3 years at the maximum.

Chairman HAYDEN. The universal testimony here is that power in that whole region is short.

Mr. WALTER. We are absolutely in a brownout. We are in a power-shortage area. This would produce between ten and twelve thousand kilowatts, which is on a 12-month basis. And it is used by the farmers, a portion of it, for pumping during the irrigation process.

Chairman HAYDEN. You are buying power now?

Mr. MILLER. Yes. Our pumping plant was incorporated in the original plan for the project primarily to provide pumping power to

serve about 25,000 acres, which is at least a third of the total project acreage. We should have it. It has just been overlooked, I think. And we are concerned because it is not in the budget. I believe the House is favorable to it.

Mr. WALTER. It was not included in the House.

Mr. MILLER. No, not by the House. It has been brought up since. Not by the Budget.

Chairman HAYDEN. We have asked the Bureau of Reclamation to give us the justification for this, which will be printed in the record.

Mr. WALTER. The powerplant and a million dollars of that power revenue is to amortize the irrigation features of it, plus the money which they have spent. But the contract that Roza has with the Bureau of Reclamation and that has been approved says that the water users will not have to pay this back, should that powerplant not be built. So it is to the benefit of the Government more than the water users that this plant be built, so that they get reimbursed for their $5 million.

Mr. MILLER. It is of benefit to everybody concerned. Really it is. And you will get your $3 million back if it is built.

Chairman HAYDEN. Thank you.

PREPARED STATEMENT

(The statement referred to follows:)

STATEMENT OF H. LLOYD MILLER, PRESIDENT OF THE ROZA IRRIGATION DISTRICT, YAKIMA PROJECT, IN BEHALF OF APPROPRIATIONS TO START CONSTRUCTION ON THE ROZA POWERPLANT

The Roza unit of the Yakima irrigation project is practically completed with the exception of a power dam which is an integral part of the system. We understand that the Bureau of Reclamation had asked that it be placed in the budget, but members of our congressional delegation in Washington indicate that the budget did not allow money for the Roza powerplant. We feel it is so necessary that this powerplant be built in the very near future that we are asking for approval by your committee.

The very earliest engineering reports leading up to the original authorization of the Roza division of the Yakima project contemplated the construction of a 10,000 kilowatt powerplant to be located at mile 10.9 of the main canal to utilize a 165-foot drop from the Roza main canal back to the Yakima River. The powerplant was incorporated in the original project plan primarily to provide pumping power to serve approximately 25,000 acres, located above the main canal, of the total project acreage of 72,000. This arrangement was provided for in an engineering report issued February 17, 1930, upon which the original repayment contract with the irrigation district was based as executed between the Yakima-Benton Irrigation District and the United States on December 13, 1935. Preliminary water filings by officials of the irrigation district, including those for the powerplant, were made prior to 1930.

The chief remaining uncompleted feature of the Roza division outside of drainage works is the Roza division powerplant. The United States has constructed various facilities to serve the Roza division of the Yakima project including storage reservoirs, a diversion dam and substation, transmission lines, pumping plants and substations, laterals, sublaterals, and appurtenant and incidental facilities.

In accordance with the original repayment contract and with the original project plan a diversion dam, 10.9 miles of main canal, wasteway No. 2 headworks structure, and tailrace to the Yakima River were all designed and built to provide capacity for the future installation of the powerplant, and the present investment in power canal capacity alone is approximately $1 million.

Two-thirds of the output of the proposed powerplant will be used to supply pumping power for use on the Roza division and the balance will be allocated and marketed as commercial power. At the time the main canal was constructed down to the location of the powerplant at wasteway No. 2, an additional investment was made to provide for power in the canal capacity which was in the late thirties prior to the outbreak of World War II. The decision was made with the concurrence of the irrigation district board that expenditures would be concentrated on the completion of the gravity canal and distribution system so that construction of the powerplant was deferred at that time. Following the outbreak of World War II, construction of the irrigation facilities of the Roza division was pushed to completion as a war food project, but due to scarcity of critical materials the powerplant was again deferred with the result that the entire irrigation system exclusive of drainage but including all of the project pumping plants and associated substations and transmission facilities were completed.

It is in the best interests of the water users and the United States that the powerplant be completed as soon as possible. First, to recover the total investment of some $3,031,978 which has already been invested in power canal and other costs and which are assigned for repayment from the powerplant. Prior to the availability of project power, irrigation pumps are being supplied from the system of Bonneville Power Administration at a delivered cost of five-tenths of a mill higher than will be the case when the plant is completed. Finally, a completion of the powerplant will furnish to the irrigation district a guaranteed and independent source of pumping power at a rate of approximately 2.75 mills per kilowatt-hour, which rate will cover all operating costs of the transmission facilities, including transmission losses and part of the cost of operating the diversion dam, headworks, and canal. Under the new BPA rate schedule effective December 20, 1954, the rate for power purchased from BPA for the district's pumps has been estimated to average 2.35 mills per kilowatt-hour at the points (Grandview and Roza substations) where the Bonneville power enters the project's seventy-odd mile transmission line. In addition, the district is obligated to pay operating costs and transmission losses on the project transmission facilities. Also, the district pays all the operation and maintenance costs of the diversion dam, headworks and canal, part of which will ultimately be jointly used for irrigation and power. This results in a present delivered cost of 3.25 mills per kilowatt-hour. After the cost of the powerplant is completely paid out the district will receive pumping power at essentially the cost of operation and maintenance and replacements which would be considerably less than 2.75 mills.

An amendatory repayment contract (14–06–W–69, July 22, 1953) between the United States and the Roza Irrigation District provides for the repayment by the district of the cost of most of the facilities built to serve the district. In the course of negotiations prior to the signing of this contract, it was assumed that the Roza powerplant would be constructed by the United States, and certain project costs were assigned for repayment from power revenues. The costs assigned for repayment from power revenues under article 8 (c) of the contract are:

1. The cost of the Roza powerplant.
2. $1,000,000 of the cost of the Roza canal.
3. The cost of pumping plant transmission facilties.
4. $1,137,818 of the estimated cost or irrigation works.

The present estimate of the cost of the Roza powerplant is $2,913,000 and the estimated cost of transmission facilities to serve the district's pumps is $894,160.

The preceding items 2, 3, and 4 totaling $3,131,978 are costs which have already been incurred and which will not be returned to the United States except by construction of the Roza powerplant. The construction of the powerplant will provide for the return of these costs and also the cost of the powerplant itself through the furnishing of pumping power to the district and the sale of surplus power.

Respectfully submitted.

H. Lloyd Miller,
President, Roza Irrigation District.

MIDDLE RIO GRANDE FLOOD CONTROL ASSOCIATION

STATEMENT OF JOHN PATRICK MURPHY, EXECUTIVE SECRETARY, AND HUBERT BALL, CHIEF ENGINEER

RIO GRANDE PROJECT

Chairman HAYDEN. Mr. Murphy and Mr. Ball?

Mr. MURPHY. Mr. Chairman, in the interest of brevity and to conserve the time of the members of this committee, I would like to read the first 2½ pages of my report, and I would like then for the rest to be printed in the record, please.

Chairman HAYDEN. You may read it, as you suggest, and the remainder will be placed in the record.

Mr. MURPHY. My name is John Patrick Murphy and I am executive secretary of the Middle Rio Grande Flood Control Association. I have been authorized by the board of directors of this association to appear on their behalf and present their views in support of the Bureau of Reclamation program for continuation of the work on the Rio Grande project; and the need for acquisition of all outstanding bonds of the Middle Rio Grande Conservancy District by the Federal Government.

This project was authorized for appropriations in 1948. However, at that time, the Budget Bureau incorrectly classified the reclamation phase of the work as a "new start" instead of a rehabilitation and water salvaging program.

Chairman HAYDEN. We had some difficulty in straightening that out.

Mr. MURPHY. Therefore, from year to year, nothing was recommended in the budget for the Bureau of Reclamation phase of our project. We did, however, receive some emergency money in the years 1952 and 1953 amounting to $3,513,000.

Finally, in fiscal year 1954, Congress recognized that our project was not a "new start" and followed through on their convictions by appropriating $1,630,889 with which to start construction work on our long delayed rehabilitation program. Then last year the Congress appropriated $2 million with which to continue this important work.

During the past 3 years of this rehabilitation program by the Bureau of Reclamation, they estimate that savings in water have already amounted to over 100,000 acre-feet. This was channeled through the San Marcial swamps into Elephant Butte Reservoir where it was sorely needed. In dollar value, on the basis of a minimum of $35 per acre-foot, they evaluate the savings thus far as worth over $3,500,000 to the lower valley of New Mexico and Texas. They further believe that these savings may go as high as 40,000 acre-feet of water per year, as the program advances.

At this point, I would like to explain briefly the importance of getting water through the middle valley and into Elephant Butte Reservoir for use by the lower valley: Under the terms of the Rio Grande compact, the middle valley is obligated to deliver certain quantities of water to the lower valley.

Because of unforeseen water losses which have developed in our river channel since the framing of this compact, coupled with 11 continuous years of drought, we can no longer meet our compact

obligations. The consequent penalty—though it is no fault of ours—is that we have been forced to open the gates on our only storage dam in the middle valley and let the water flow through to Elephant Butte Reservoir in the lower valley. We are now faced with the impossible task of trying to operate an irrigation district without water other than from rainfall in a semiarid country.

WATER REACHING ELEPHANT BUTTE DAM

Chairman HAYDEN. Might I ask: Of the quantity of water released, how much of it actually got down to the Elephant Butte Dam?

Mr. MURPHY. Well, in the last few years, since we were able to channel that swamp, we have been able to get some water through there.

Chairman HAYDEN. There is bound to be, though, a tremendous loss from evaporation and seepage, and so on.

Mr. MURPHY. That is true.

Chairman HAYDEN. How many miles from the reservoir that you opened up to the reservoir that catches the water?

Mr. BALL. Two hundred and twenty-five miles.

LOSS OF WATER BY EVAPORATION

Chairman HAYDEN. Well, that is riverbed all the way, that can absorb water, and the water is exposed to evaporation, so there is bound to be a tremendous loss.

Mr. BALL. A terrific loss, Mr. Chairman.

Mr. MURPHY. This debit situation to the lower valley and Texas can be alleviated through saving of water now being lost by poor drainage conditions within the Middle Rio Grande project lands and along the river channel, and by the elimination of the salt cedar infestations.

For fiscal year 1956, the Bureau of Reclamation requested a total of $10,619,000 for its phase of our Rio Grande project. $3,300,000 of this money was programed to be spent on canals, laterals, drains and channels; with $600,000 going to repair El Vado Dam, Isleta and San Acacia Dams and general property equipment.

The Interior Department realizes how urgent this rehabilitation work is to the States of Texas and New Mexico because the sooner the water salvaging program is completed and our water supply stabilized, the sooner we can pay our water debt to the lower valley, and thence start storing the essential water in El Vado Reservoir for use in our own irrigation district.

The work of restoring the agricultural facilities of this important area can no longer be postponed without serious deterioration of the valley's ability to support its established economy and its ever increasing population.

The Budget Bureau has approved $3,500,000 for the continuation of this important rehabilitation program, which—although it is $419,000 short of the amount requested—still, it is enough, so that we can proceed in an orderly fashion. And we sure hope that this committee will not cut that figure.

Now, Mr. Chairman, on the bond issue, I am not going to discuss that, because Mr. Hubert Ball, the chief engineer of the Middle Rio Grande Conservancy District, is here and fully authorized to discuss that in any manner in which you would like to have it discussed.

PREPARED STATEMENT

And I want to thank you sincerely for listening to our testimony. (The remainder of the prepared statement follows:)

The Budget Bureau also sent to the Congress a supplemental request in the amount of $6,700,000 for fiscal year 1956 with which to acquire the outstanding bonds of the Middle Rio Grande Conservancy District.

On February 1 of this year, the Federal Government, through the Bureau of Reclamation, has taken over the operation and maintenance of the conservancy district.

By the terms of the contract agreement, it was provided among other things:

"(1) That the United States will agree to acquire outstanding bonds of the district at prices and on terms satisfactory to the Secretary and to assume the obligation of the district created thereby or of such part thereof as the Secretary deems necessary, and that no construction will be initiated until the Secretary has so acquired said bonds;"

The opinions expressed above were converted into a covenant of the repayment contract, dated September 24, 1951.

Article 37 of that agreement reads in part as follows:

"* * * Provided, it is the intent and purpose of both parties to this contract that the acquisition and cancellation by the United States of the outstanding bonds, evidencing the present bonded obligations of the district, as provided in article 9 (a) of this contract, shall be accomplished at the earliest date possible in order that:

"(a) The present method of assessment under the Conservancy Act may be discarded and the more equitable method of assessment adopted, as provided herein under the terms of the Conservancy District Reclamation Contract Act and the Federal reclamation law.

"(b) Savings may be made to the district and the United States by the elimination of interest payments on the outstanding bonds."

The benefits as established to accrue from this conservancy project were allocated at about 57 percent to urban properties and utilities and 43 percent to agricultural properties. The benefits thus established by the appraisers were confirmed by the conservancy court, and became the fixed appraisal of benefits for all or any part of the official plan.

We are all painfully aware of the fact that the basis of assessment was and is economically unsound as to agricultural property and is inequitable to urban property.

For instance, a lot vacant at the time of the appraisal of benefits upon which extensive improvements have since been constructed, carries an assessement of benefits as set at the time of appraisal. Actually, this valley has enjoyed a tremendous population growth and the industrial development plus new construction runs into the hundreds of millions of dollars. A change of assessment cannot be made until after the acquisition and cancellation by the United States of the outstanding bonds.

On the other hand, the purchase of the bonds by the United States would permit a much needed adjustment in the assessment on urban property, public corporations and utilities in that the levy for future payments would be placed on an ad valorem or just appraisal basis and require new construction to pay its proportionate share, which cannot be accomplished under present methods.

The repayment contract between the United States and the Middle Rio Grande Conservancy District was drawn up to accomplish this important objective of financial stability. Essentially it provides that upon acquisition of the bonds by the United States the district will continue to make assessments and levies during the construction period equivalent to current levels, and turn collection thereof over to the United States to be applied to reduce the district's repayment obligation.

Thus, if construction continues for 5 years following acquisition of all outstanding bonds, the district will reduce its repayment obligation by approximately $1,900,000 before the beginning of the repayment period; $900,000 of this $1,900,000 representing interest costs would be a direct savings to the district.

In summary, then, the sooner the bonds are acquired, the greater the saving in interest cost to the district; and the greater the saving in interest cost, the more the district can reduce its repayment obligation during the construction period.

Under New Mexico law the district has accumulated about $1,400,000 in the guaranty fund. The repayment contract further provides that upon acquisition

of all bonds by the United States, the guaranty fund will be applied to reduce the reimbursable costs of the project.

While an appropriation of $6,700,000 will be required to acquire the bonds, immediately upon acquisition, $1,400,000 would be returned to the Treasury through the district applying its guaranty fund to the reimbursable costs of the project. Thus, the net cost to the Government of acquiring the bonds would not exceed $5,300,000.

The conservancy district and the people in the Middle Valley are extremely anxious to have the bonds purchased in fiscal year 1956 so as to effect an annual interest saving of $185,000, which saving can then be applied to reduce the district's reimbursable obligation as outlined above.

Therefore, it is in accordance with the agreement as signed by the Federal Government, and now approved by the Budget Bureau, that we request this committee to recommend appropriations for the acquisition of these bonds as intended in the contract. This will result in essential savings for the Government and also bring about a measure of relief for the farmers in the Rio Grande Valley. We also plead for the $3,500,000 with which to continue our rehabilitation and water-salvaging program.

On behalf of the Middle Rio Grande Flood Control Association and the 400,000 people whom I represent, I wish to say thank you.

FEDERAL COURT ACTION

Chairman HAYDEN. Let me ask you this. There was a suit, as I understood it, that resulted in your having to turn this water loose.

Mr. MURPHY. That is right.

Chairman HAYDEN. But actually, how much good did it do the Texans? How much water did they get down into El Paso?

Mr. BALL. For the record, I am Hubert Ball, the chief engineer. I might answer that.

They didn't get any of the water, Mr. Chairman. Practically all the water was lost. And as a result, then, the Texas people came in to help us get a project through, the comprehensive plan and the channelization at San Michel; and they have been very active in helping us get that part of the project started and completed. And now a much greater percentage of the water goes into Elephant Butte than formerly it did. It has been of almost immeasurable benefit, when you figure how much an acre-foot of water is worth in the Elephant Butte district.

Chairman HAYDEN. I was convinced at the time when the Texans complained that the natural conditions were such that you might lose the water but they could not gain it.

Mr. BALL. That is right, Mr. Chairman.

Chairman HAYDEN. And so the only way was to go back to do this rehabilitation work and get yourselves in shape so that you could save the water.

You mention our old friend, salt cedar. What are you doing about that? Have you found any way to kill it?

ELIMINATION OF SALT CEDARS

Mr. BALL. The Bureau of Reclamation and the State of New Mexico and the conservancy district are cooperating in a program to eliminate the salt cedars. And I can tell you it is a problem. They are a good tough adversary. We have tried poisoning and spraying, particularly by airplanes. And I am afraid we killed almost as much cotton as we did salt cedars.

We have had a combination of spraying, dragging with cables, bulldozers pushing it out, and now we have some large disk-type plows

that they are plowing the floodways in that area with. And a combination of all of those programs we think will keep the salt cedars within bounds.

There is no question but what it is an expensive program. But the salt cedars from that area were using from 11 to up to 18 and 20 acre-feet of water per acre per year. So when you figure that an acre-foot of water down in Elephant Butte will raise a bale of cotton that is worth two or three hundred dollars, you can realize that you can afford to spend a lot of money eliminating salt cedars.

Chairman HAYDEN. Where do they come from?

Mr. BALL. I really don't know.

Chairman HAYDEN. They were not in that country when I was a boy. There were none in Arizona at that time. It came from some foreign country.

Mr. BALL. I think they are pretty well scattered over large parts of the world, all right. They are a very widely scattered type of vegetation.

Chairman HAYDEN. They were not anywhere in the Southwest.

Mr. BALL. They may have been brought over by the Spanish people. There are some pretty large salt cedars in the yards and around some of the old adobe houses in Albuquerque that must have been there for a period of years, Mr. Chairman.

Chairman HAYDEN. I think the salt cedar that grows in a thicket in a river bottom is different from the trees you see in the yards. They are two different varieties of the same plant.

Mr. BALL. And they will grow on dry land or wet land, if they just get half a chance to take root. Their roots will really go after the water.

Chairman HAYDEN. Mr. Ball, we will be glad to hear you about the bond purchase.

Mr. BALL. Mr. Chairman, I don't want our district to monopolize the time of the committee, so I would like to present this prepared statement. And I believe the chairman might have some questions he would want to ask concerning the purchase of the bonds which this statement deals with principally.

Chairman HAYDEN. By taking advantage of the $1,400,000 that is in the guaranty fund, could all of the outstanding bonds be purchased with the $5,800,000 in new funds plus $3 million carryover programed for this project?

Mr. BALL. Yes, sir; it could.

Chairman HAYDEN. That could be done?

Mr. BALL. Yes. We are in a little different position than Congressman Engle was here this morning. The House committee gave us $5,300,000, and then when they voted on it on the floor, and Congressman Miller's project came through, we got more money than the committee recommended.

RESOLUTION AND PREPARED STATEMENT

I have a resolution here, signed by the chairman of the district and passed at a special board meeting that I called for that purpose, that I would like to make a part of the record at this time.

Chairman HAYDEN. It will be received, together with your statement.

(The resolution and statement referred to follow.)

RESOLUTION

Whereas, pursuant to chapter 50, 1931 New Mexico Session Laws, being section 75-30-40, New Mexico Statutes Annotated, 1953 compilation, the Middle Rio Grande Conservancy District, a municipal corporation, established a guaranty fund, and since the passage of such legislation have been levying and collecting assessments enhancing such guaranty fund which is now held intact by the Middle Rio Grande Conservancy District; and

Whereas the State Legislature of the State of New Mexico in the year 1939 enacted what is known as the conservancy district reclamation contract act, the same being chapter 148 of the 1939 New Mexico Session Laws, and being article 32, New Mexico Statues Annotated, 1953 compilation; and

Whereas it was and is provided under section 16 of the conservancy district reclamation contract act, being section 75-32-16, New Mexico Statutes Annotated, 1953 compilation, that: "75-32-16—use of district funds to pay contract indebtedness: There may be used to pay indebtedness to the United States created by a reclamation contract, as the same may become due, the preliminary fund, construction fund, maintenance fund, guaranty fund or conservation and development fund, or any one or more of said funds, provided for by the conservancy act, of any contracting district within the provisions of section 5 (2) (75-32-5 (2)) of this act;" and

Whereas, on the 24th day of September 1951, the United States of America and the Middle Rio Grande Conservancy District, pursuant to the Federal reclamation law and the conservancy district reclamation act, entered into a contract which provides that the United States of America, among other things, would,to the extent that funds are available, construct certain project works for the benefit of the Middle Rio Grande Conservancy District; and

Whereas one of the construction features set forth under article 9 of the contract between the United States of America and the Middle Rio Grande Conservancy District is that the United States will "acquire through the district at prices satisfactory to the contracting officer, the outstanding bonds evidencing the present bonded obligation of the district;" and

Whereas it has been brought to the attention of the board of directors of the Middle Rio Grande Conservancy District that the Congress of the United States is now considering appropriating funds over and above the guaranty fund now held by the Middle Rio Grande Conservancy District as may be necessary for the acquisition of the outstanding bonded indebtedness of the district in the event the Middle Rio Grande Conservancy District will use the guaranty fund to supplement the appropriation of the Congress of the United States to acquire the aforesaid outstanding bonds of the district; and

Whereas it was and is provided by article 25 of the contract between the United States of America and the Middle Rio Grande Conservancy District, as follows: "Pursuant to chapter 50, Laws of New Mexico, 1931, the district established and has maintained a guaranty fund as provided therein and it is agreed that the district shall continue to maintain said guaranty fund in accordance with the provisions of said chapter 50, Laws of New Mexico, 1931; provided, however, that upon the acquisition of all bonds by the United States, the guaranty fund will be applied to the reimbursable costs of the project;" and

Whereas it was and is provided under article 37 of the contract between the United States of America and the Middle Rio Grande Conservancy District as follows: "* * * It is the intent and purpose of both parties to this contract that the acquisition and cancellation by the United States of the outstanding bonds, evidencing the present bonded obligations of the district, as provided in article 9 (a) of this contract, shall be accomplished at the earliest date possible in order that savings may be made to the district and the United States by the elimination of interest payments upon the outstanding bonds;" and

Whereas it is the intent of the board of directors of the Middle Rio Grande Conservancy District to use the guaranty fund, pursuant to section 75-32-16, New Mexico Statutes Annotated, 1953 compilation, and known as the conservancy district reclamation contract act, to supplement the appropriation made by the Congress of the United States to pay and discharge one of the construction features provided for in the contract between the United States of America and the Middle Rio Grande Conservancy District, viz: to acquire the outstanding bonds evidencing the present bonded inbedtedness of the Middle Rio Grande Conservancy District: Be it therefore

Resolved, That when the Congress of the United States of America has appropriated sufficient funds, as supplemented by the guaranty fund of the Middle Rio Grande Conservancy District, for the acquisition and cancellation of the

outstanding bonded indebtedness of the Middle Rio Grande Conservancy District, the district will use the guaranty fund, supplemented by the appropriation of the Congress of the United States, to pay and discharge one of the construction features of the contract between the United States of America and the Middle Rio Grande Conservation District, viz: The acquisition and cancellation of the bonded indebtedness of the Middle Rio Grande Conservancy District; be it further

Resolved, That in the event any litigation is necessary to carry out the intent of the board of directors, hereinabove set forth, then and in that event, the Board of Directors of the Middle Rio Grande Conservancy District obligates itself to prosecute or defend any legal proceedings that may be necessary to effectuate the purposes herein set forth and the intent expressed in the contract between the United States of America and the Middle Rio Grande Conservancy District.

Done this 14th day of June, 1955.

MIDDLE RIO GRANDE CONSERVANCY DISTRICT,
A MUNICIPAL CORPORATION
By L. G. ZARTMAN, *Chairman pro tempore.*

Attest:

J. W. GAY, *Secretary.*

STATEMENT OF HUBERT BALL, CHIEF ENGINEER OF MIDDLE RIO GRANDE CONSERVANCY DISTRICT REGARDING CONTINUED APPROPRIATIONS FOR COMPREHENSIVE PLAN OF DEVELOPMENT

Mr. Chairman, my name is Hubert Ball and I am chief engineer of the Middle Rio Grande Conservancy District, with main offices located in Albuquerque, N. Mex.

The Middle Rio Grande Conservancy District is a flood-control, drainage, and irrigation district operating in accord with the Conservancy Act, State of New Mexico, and is a political subdivision thereof. At the present time, the conservancy district, besides operating in accord with State law, also is cooperating in the operation, maintenance, and rehabilitation of the district under various contracts and amendments thereto with the United States Government, particularly the Department of the Interior and the Corps of Army Engineers.

We are appearing before your committee today supporting continued appropriations to carry out the terms of these contracts which were made and signed in accordance with the comprehensive plan for the Rio Grande Basin as set forth in the report of the Chief of Engineers dated April 5, 1948, and in the report of the Bureau of Reclamation dated November 21, 1947, all in substantial accord with the agreement approved by the Secretary of the Army and the Acting Secretary of the Interior on November 21, 1947. This comprehensive plan has been authorized by various acts of Congress, particularly Public Law 858, 80th Congress, page 771, 2d session, and Public Law 516, 81st Congress, page 188, 2d session. These Public Laws authorized appropriations in varying amounts to carry out various features of this comprehensive plan and we are now here urging that appropriations as approved and requested by the Bureau of the Budget for 1956 be made in accordance with the aforementioned authorizations and contracts.

This committee is considering two specific items, as follows:

First: $3,500,000 to carry on construction work now underway within and adjacent to the Middle Rio Grande Conservancy District. Since the committee has listened to many witnesses and reports justifying the rehabilitation of the Middle Rio Grande Conservancy District, I believe that it would be improper for me to consume the time of this Congress in a repetition of this material which completely justifies this continued construction. Since it has been requested by the Department of Interior and approved by the Bureau of the Budget, I have no doubts that the action of this committee will be favorable.

The second, and equally important item, concerns an appropriation which would allow the Secretary of the Interior to acquire the bonds of the Middle Rio Grande Conservancy District now outstanding. This appropriation has been specifically authorized by the various authorization acts heretofore mentioned and was contemplated in testimony and contracts under which the Middle Rio Grande Conservancy District is now operating.

Since there undoubtedly will be many questions concerning the authorization of this item and appropriations as requested, I am including at this point a detailed statement, which, I hope, will answer any questions the committee might have in mind regarding the legality and authorization of this proposal.

AUTHORIZING LEGISLATION

The Middle Rio Grande project and specific acquisition of the district's bonds was authorized by Public Law 516, 81st Congress, chapter 188, 2d session, H. R. 5472, page 15:

RIO GRANDE BASIN

"In addition to previous authorizations, there is hereby authorized the completion of the plan approved in the Flood Control Act of June 30, 1948, for the Rio Grande Basin, at an estimated cost of $39 million for the work to be prosecuted by the Department of the Army and $30,179,000 for the work to be prosecuted by the Department of the Interior as set forth in House Document Numbered 243, Eighty-first Congress."

and by Public Law 858, 80th Congress, chapter 771, 2d session, H. R. 6419, pages 9 and 10:

RIO GRANDE BASIN

"The comprehensive plan for the Rio Grande Basin as set forth in the report of the Chief of Engineers dated April 5, 1948, and in the report of the Bureau of Reclamation dated November 21, 1947, all in substantial accord with the agreement approved by the Secretary of the Army and the Acting Secretary of the Interior on November 21, 1947, is hereby approved * * *"

"Approval is granted to the Secretary of the Interior subject to the limitation of the authorizations approved from time to time for the prosecution of this plan to acquire in the name of the United States, by purchase or otherwise any or all of the bonds and other evidences of indebtedness of the Middle Rio Grande Conservancy District outstanding when such authorizations are approved at such prices and on such terms and conditions as he shall deem necessary or proper for the protection of the investment of the United States and to retire those obligations on such terms and conditions as he shall likewise deem proper or necessary."

House Document No. 243 referred to above contains specific language, page 71, article 252 dealing with acquisition of the bonds as follows:

"*252. Plan for rehabilitation.*—The plan for rehabilitation of the Middle Rio Grande Conservancy District includes the acquisition of the present irrigation works and the following major features of construction work * * *."

"*253. Costs and annual charges.*—The costs and annual charges, based on prices as of January 1947, for acquiring and rehabilitating the works of the Middle Rio Grande Conservancy District have been estimated by the Bureau of Reclamation to be as follows:

Item No.	Feature	First cost	Annual charges
1	Reconstruction and extension of existing project works	$10,807,100	$772,340
2	Acquisition of present irrigation works	7,426,280	288,660
	Total	18,233,380	1,061,000"

The report of the Bureau of Reclamation dated November 21, 1947, referred to in Public Law 858 is contained in House Document No. 653, 81st Congress., 2d session. Page 197 of this document contains the following language:

ACQUISITION OF DISTRICT OBLIGATIONS

"As to existing district obligations, there appears to be no remedy to relieve the district from the effect of its original economically unsound basis of assessment of benefits and its consequent restricted financing operations short of cancellation of the existing bonded debt. Under bill S. 1925 introduced by Senator Chavez, if the outstanding bonds may be retired by the district and the conservancy works acquired at a price not to exceed the value of such constructed works, as determined by the Secretary of the Interior, it is believed the district may enter into a repayment contract with the United States under such Federal reclamation laws, and to admit of its assuming a so-called joint and general contract obligation for repayment of construction including the cost of acquisiton of existing works, and change its present inequitable basis of assessment to one which is equitable

and economically sound for the financing of repayment of construction, operation, and maintenance costs on such contemplated project works.

Total amount of bonds to be retired after August 1, 1949, $7,614,000."

House Document No. 653, page 222, under plan of rehabilitation and development, further states:

"Rehabilitation of the conservancy district would involve: first the purchase of the existing works, free of indebtedness, in order to eliminate the existing lien against the land and to permit revision of the present inequitable method of levying charges. * * *"

House Document No. 653, page 241, also states:

SUMMARY OF CAPITAL COSTS, 1947 PRICES

"Irrigation and drainage:	
Existing project works	$7,426,280
Reconstruction and extension of project works	10,807,100
Subtotal	18,233,380

SENATE HEARINGS, 1948

Hearings before a subcommittee of the Committee on Public Works, United States Senate, 80th Congress, 2d session, on H. R. 6419, cover in detail discussions of the Middle Rio Grande project. John L. Mutz, area engineer, Bureau of Reclamation, testified (item 11) as follows (p. 306):

"Retirement of outstanding obligations of the Middle Rio Grande Conservancy District to obtain more flexible method of assessments."

Page 311 of the hearings are as follows:

"Thus, it is clear that the outstanding bonds of the conservancy district should be retired to alleviate the present inequitable method of assessment which restricts the successful development of the project. * * *"

"The conclusions reached after careful study were that, to make this a successful project (1) the outstanding bonds would have to be retired, (2) adjustments would have to be made in existing taxes and assessments, and (3) a new and equitable method of assessments adopted. * * *"

"It is proposed to acquire and retire the outstanding obligations of the district, make the necessary improvements and extensions to the works, and establish an appropriate method of assessment. * * *"

In the same hearings, Mr. Wesley R. Nelson, Assistant Commissioner, Bureau of Reclamation, testified (p. 299) as follows:

"An important and necessary part of the plan is the financial rehabilitation and reorganization of the conservancy district, which includes purchase by the Government of the outstanding bonds of the district which now amount to $7,426,280. * * *"

Further, in the same hearings, page 301, letter from Mr. Oscar L. Chapman, Acting Secretary of the Interior, to the chairman of the Committee on Public Works, says:

"It will be noted that the reimbursable construction cost includes the costs of acquiring the outstanding bonds of the Middle Rio Grande Conservancy District. These now amount to somewhat over $7,000,000. Their acquisition and orderly retirement, as provided in section 4 of the bill, is an essential part of the plan for rehabilitating the area * * *"

I now include at this point a statement showing the financial status of the Middle Rio Grande Conservancy District as of May 30, 1955. This outlines the amount of moneys available from the district and money required from Government funds by this appropriation to carry out the terms of the contract between the Bureau of Reclamation, Department of the Interior, and the Middle Rio Grande Conservancy District.

ANALYSIS OF CONSERVANCY DISTRICT BOND ACQUISITION

At present the Middle Rio Grande Conservancy District has outstanding $6,661,000 in bonds. Of these bonds $6,301,000 are 2.7 percent bonds, which are subject to a $15 per thousand dollar call premium, and $360,000 are 2.6 percent bonds which are callable without premium. The Middle Rio Grande Conservancy District will retire $124,000 of 2.7 percent bonds and $77,000 of 2.6 percent bonds on August 1, 1955.

Cost of acquiring district outstanding bonds on August 1, 1955, or February 1, 1956, is estimated as follows:

2.7 percent bonds	$6,177,000.00
Premium $15 per 1,000	92,655.00
2.6 percent bonds	283,000.00
Total bonds and premium	6,552,655.00
Bond canceling fee, advertising, etc	6,960.00
Total costs	6,559,615.00
Funds available April 30, 1955, for bond payments are as follows:	
Guaranty fund	$1,047,205.24
Sinking fund	[1] 603,453.40
Total as of Apr. 30, 1955	1,650,658.64
Premium and interest from sale of district owned bonds	3,745.50
Total as of Aug. 1, 1955	1,654,404.14
Minus district bond expense	−291,277.55
Available to pay the United States	1,363,126.59
Net increase in district funds between Aug. 1, 1955, and Feb. 1, 1956, should make available a minimum of	1,400,000.00

RECAPITULATION

Estimated cost of acquiring district bonds	$6,600,000.00
Less funds available by the district	−1,400,000.00
Net cost of acquisition	5,200,000.00

[1] Includes $97,580 of $99,000 par value conservancy district-owned bonds.

The paying agents for district bonds are the American National Bank & Trust Co. of Chicago and the City Bank Farmers Trust Co. of New York, N. Y.

I have been asked numerous times who owns the conservancy district bonds and their present location and the terms by which they have been sold to the various investors throughout the country. To answer any questions arising in the minds of the committee and the Congress, I am including at this point a statement prepared by me on May 30 regarding this aspect of the bonds retirement by the United States Government.

In 1946, when the refunding bonds were offered for sale, the various bond companies handling the issue published a circular showing the offering prices. I have been informed by reliable members of these bond companies that no 2.7-percent bonds were sold for less than 101½ which is the call price at present. This would indicate that there is no probability of any windfall payment through the $15 premium which we are required to pay at present.

The 2.6-percent bonds were sold at a minimum of 100, and since there will only be $283,000 of these to be redeemed, I do not believe that the $15 premium of these 283 bonds would be much of a windfall, particularly since we believe that they are held only in small lots.

Mr. George Gruner in charge of the municipal bond department for John Nuveen & Co. of New York reports that at the present time their books indicate the largest block of conservancy bonds, which is 257 $1,000 bonds, are owned by the Connecticut Fire Insurance Co. of Hartford, Conn. The next largest, 200 $1,000 bonds, owned by Harvard University at Cambridge, Mass., 100 $1,000 bonds owned by Monarch Life Insurance Co. of Springfield, Mass.

During 1949 or 1950 there were other blocks of bonds which were considerably larger, however, Mr. Gruner, who was with Lee Higginson Co. of Chicago at that time, personally assisted in the breakup and sale of these large blocks. His opinion is that they are now mostly in blocks of 10 to 15 bonds and are scattered throughout the United States.

Mr. Longwell of the Boettcher & Co. firm Denver, Colo., corroborates in Mr. Gruner's opinion.

Mr. VICTOR Zahner of Zahner & Co., Kansas City, further concurs with this one exception, he knows of a block of 100 $1,000 bonds which are owned by the St. Paul Fire & Marine Insurance Co.

Mr. Empey of the John Nuveen Co. of Los Angeles, Calif., states that he has no knowledge of any large block of conservancy bonds owned by any firm or individual on the Pacific coast.

All of these people have stated that they would be perfectly willing to answer any questions the committee might ask regarding the location of these bonds and also state that their books are open for inspection to any member or representative of the committee. They also believe that, if further detailed information as to the location is necessary, the committee might obtain this information from the paying agents of the Middle Rio Grande Conservancy District which has been listed above.

In conclusion, I would like to make the following comments which were the consensus of opinion of the board of directors of our district and also the feelings of the local people regarding this appropriation.

The contract between the United States and the Middle Rio Grande Conservancy District was entered into in good faith by each of the contracting parties, and has been approved by eight judges. The United States contracted to perform certain services for and on behalf of the district, and the district obligated itself, which includes all the landowners within the confines of the Middle Rio Grande Conservancy District, to pay for certain of the services to be performed and rendered by the United States of America.

After the contract was finally validated by the decision of the supreme court of the State of New Mexico, the United States immediately took steps to carry out the terms of the contract by performing certain construction work rehabilitating the works of the district. It was and is recognized in the contract that the work contracted to be performed by the United States would only be done insofar as funds were available. This work included both reimbursable and nonreimbursable features. As to the reimbursable features of the contract, for which the district is obligated to pay, the United States, as security for the repayment of this part of the construction costs, acquired and now holds title to all of the works of the district, and on January 4, 1955, there was negotiated between the United States and the district an amendatory contract providing for the United States to assume the operation and maintenance of the district works beginning February 1, 1955. Everything has been done by each of the contracting parties, insofar as it has been possible to so do, to carry out the terms of the contract. The construction work contemplated under the terms of the contract has been moving forward in a very satisfactory manner.

It was understood by each of the contracting parties, and the contract so provides, that the expenditure of any money in carrying out the various features of the contract is contingent upon appropriations by the Congress of the United States. One of the main objects was the acquisition by the United States of the outstanding bonded indebtedness of the district. The intent of the contracting parties was that this should be accomplished at the earliest possible date in order that the present method of assessments under the Conservancy Act could be discarded and a more equitable method of assessments adopted under the Conservancy District Reclamation Act, and the Federal reclamation law, to the end that savings would be made to both the contracting parties by the elimination of interest payments on the outstanding bonds.

There was no specified time spelled out in the contract as to when appropriations would be made for the purpose of acquiring the outstanding bonded indebtedness against the district by the United States. This, of course, was for the judgment of the Congress. The contract provides that this should be done at the earliest possible date. The District, in order to accomplish one of the purposes of the contract, and to carry forward the intent of the parties, respectfully requests that appropriations be now made to retire the outstanding bonded indebtedness of the district.

We trust that this statement will clarify any questions which undoubtedly arise when a matter of this kind is considered and looking forward to a most favorable decision and full appropriation as herein requested, we thank you most sincerely for your time and sympathetic hearings we have received here today.

(Signed) HUBERT BALL.

Mr. BALL. There is the signed copy. I think that resolution very definitely indicates the good faith of the district. And I cannot see where there would be any insurmountable complications in the use of that money for retiring bonds. It cannot be used for anything else except to pay off the reimbursable cost of this project. And we might just as well buy the bonds now as to pay the Treasury back

2 days after we buy the bonds. I cannot see that there is any difference.

We want to thank the committee, Senator Hayden.

Chairman HAYDEN. Thank you.

PREPARED STATEMENT OF SENATOR CHAVEZ

We will insert at this point in the record a statement by Senator Chavez with respect to the middle Rio Grande project.

(The statement referred to follows:)

STATEMENT BY SENATOR DENNIS CHAVEZ

Funds have been requested by the Corps of Engineers in the amount of $75,000 for completion plans on the Chamita Reservoir (Abiquiu) which is an important feature of the overall flood-control project for the Rio Grande Basin. A request has also been made by the Corps of Engineers for $1,600,000 for the Rio Grande Floodway. I believe that these amounts should be retained. The Corps of Engineers should be allowed an additional amount of at least $500,000 to start work on the Chamita (Abiquiu) Dam during the fiscal year 1956, since this is a very important link in the flood-control plan for the middle Rio Grande project.

The Corps of Engineers requested certain funds for advance engineering and design. These included the Albuquerque, Artesia, and Two Rivers flood-control projects as well as the Chamita Reservoir (Abiquiu). The request was for $60,000 for the Albuquerque project, $25,000 for the Artesia project, and $50,000 for the Two Rivers project. In order to accelerate this work, the amounts should be increased to $100,000 for the Albuquerque project, $50,000 for the Artesia project, and $100,000 for the Two Rivers project. In addition to these, there should be allowed funds in the amount of $50,000 for the Los Esteros Dam and Reservoir project.

The Artesia, Two Rivers, and Los Esteros are located in the Pecos Basin, and in order to carry out a truly comprehensive program of planning for the Pecos River Basin, adequate funds should be provided for these three projects. The Los Esteros Dam and Reservoir project was authorized in the River and Harbor Act of 1954, and it was provided that construction should not be started until arrangements had been made for the transfer of irrigation storage from Alamogordo Reservoir to Los Esteros. In order to work out the necessary arrangements, additional studies will be required on the Los Esteros Dam, as well as on other portions of the Pecos Basin. In this connection, the Bureau of Reclamation has plans to allocate general investigation funds during the fiscal year 1956 for studies of the Pecos Basin. It is very essential that all of these studies be carried out concurrently so that the much-needed improvements in this basin can be done.

The Bureau of Reclamation with the approval of the Budget Bureau has submitted a request for funds in the amount of $10,200,000 for the middle Rio Grande project in New Mexico, of which $7,200,000 would be new funds and $3 million from fiscal year of 1955 unobligated balances. This includes $3,500,000 for the purpose of (1) repairing a storage dam; (2) repairing three diversion dams; (3) rehabilitation of canals, laterals, and drains; and (4) channel rectification work.

I feel that the $3,500,000 is the minimum program of construction which should be carried on and another $400,000 could be very efficiently used. They did not, however, ask for funds for channelization in the Española Valley which is a part of the authorized project. The people in that valley, particularly those from the San Juan Indian Pueblo, as well as other Indian Pueblos, and the citizens of the communities of El Guique and Velarde, have suffered considerable damage to farmlands because of the meandering of the river and recurrent flash-flood flows. I would like very much to have the construction funds increased by at least $150,000 to initiate work to care for this very serious problem.

The Bureau of Reclamation requested funds in the amount of $6,700,000 to acquire certain bonds of the Middle Rio Grande Conservancy District which is within the project. This district was organized in 1925. The construction of numerous irrigation and flood-control works was accomplished with funds obtained from the sale of bonds in the amount of $8,675,000 largely to the RFC. In 1946, the district refinanced through the sale of $8,026,000 in refunding bonds in order to obtain a lower interest rate.

The project, as authorized, provided for the acquisition by the Bureau of Reclamation of the bonds which would be retired and an amount equal to their costs applied to the construction costs. The total cost, which includes construction and cost of bonds, would be repaid by the district. The necessity for acquiring and retiring the bonds is based largely on the fact that as long as the bonds are outstanding, the method of assessment cannot be changed. The assessments are made on the basis of appraisals of benefits. It was originally assumed that waterlogged and unirrigated lands would benefit more than would the better developed lands, and, consequently, a higher charge is made against the poorer lands. This has proved to be quite inequitable and it is now proposed to establish a new method assessment which will correct inequities and charges to agricultural lands, as well as to nonagricultural property. It is understood that $3,700,000 in new appropriations is required and the additional $3 million would come from unobligated fiscal year 1955 funds. I strongly urge that these funds be made available to retire the bonds.

The Bureau of Reclamation requested funds in the amount of $5,175,000 for general investigations. The funds allowed by the House were reduced to $5,104,000. The full amount should be allowed since there is an urgent need for carrying on the planning for the Pecos Basin in cooperation with the Pecos River Commission and other agencies. There is also a great need for completing investigations in the upper Canadian, Dry Cimarron, Rio Grande, San Juan, Gila, and Mimbres Basins in New Mexico. I hope that the planning can be completed soon so that some very much needed projects can be considered by Congress.

Chairman HAYDEN. Mr. Welsh?

NATIONAL RECLAMATION ASSOCIATION, NATIONAL PRESS BUILDING, WASHINGTON, D. C.

STATEMENT OF WILLIAM E. WELSH, SECRETARY-MANAGER

PREPARED STATEMENT

Mr. WELSH. Mr. Chairman, I appreciate this opportunity of appearing before your committee again. And I have a prepared statement which, if I may, I would like to insert in the record.

Chairman HAYDEN. That will be done.

(The statement referred to follows:)

STATEMENT BY WILLIAM E. WELSH, SECRETARY-MANAGER, NATIONAL RECLAMATION ASSOCIATION, WASHINGTON, D. C.

My name is William E. Welsh. I am secretary of the National Reclamation Association.

NATIONAL RECLAMATION ASSOCIATION BACKGROUND AND POLICY

This is a voluntary association organized 23 years ago with members in all of the 17 Western States. The objectives of the association fundamentally are: To promote the development and preservation of water resources in the Reclamation States which are approved by the States and localities affected and to preserve the rights and interests of said States in their water resources.

IMMEDIATE OBJECTIVES—RESOLUTIONS

The current objectives of the National Reclamation Association are set forth each year in resolutions which are adopted at the Association's annual meeting. At the conclusion of this statement are four resolutions which set forth the National Reclamation Association objectives as they relate to the reclamation program which is now before your committee for consideration.

RECLAMATION BENEFITS ENTIRE NATION

The 4 million acres of raw desert sagebrush land that has been brought under irrigation and cultivation through reclamation and the 3 million acres of irrigated land which have been provided with a supplemental water supply by reclamation have created untold wealth that is proving to be helpful to the economy not only

in the West but in the entire Nation. The benefits which are being realized as a result of these reclamation projects will continue for centuries to come.

With our population growing and moving westward at a rate far in excess of all expectations, there will be a demand for reclamation projects long before the completion of the projects. Our dynamic and expanding economy calls for the development of our natural resources. People of the Nation want these resources developed.

Reclamation is the only means by which the arid and semiarid West can continue to grow and to prosper. The actual cost of reclamation is repaid to the Federal Treasury by the direct beneficiaries within a few years time. But more important are the indirect benefits which far exceed the cost of the projects.

GROWING POPULATION AND AGRICULTURAL SURPLUSES

There are a few basic and fundamental facts relating to our rapidly growing and westward-moving population and our agricultural surplus problem which I believe we should all keep in mind.

The story of the rapid increase of our national population has been told many times. Our population today is in excess of 165 million people. It is increasing at the rate of 2,800,000 per year or 235,000 every month. That means that there are more than 7,700 more mouths to feed every day.

Dr. B. T. Shaw, Administrator, Agricultural Research Service, Department of Agriculture, told the House Subcommittee on Appropriations for Agriculture a short time ago that our agricultural surpluses are only temporary and that we will reach a balance between production and consumption by 1962 and possibly by 1956 or 1960.

Agricultural surpluses represent the production of only 17 million acres or 5 percent of our total crop harvested in acres. (Total crop harvested acres are 349 million.)

Since 1915 our population has increased more than 50 percent, while during that same period our total agricultural acreage has remained constant and is now decreasing. In 1915 we had 3¼ crop-harvested acres plus per person, while in 1955 we have a little more than 2 crop-harvested acres per person. Two factors primarily have made it possible to continue to produce the food and fiber required for our growing population during that 40-year period.

1. To feed horses and mules, which have been reduced from 25 million in 1920 to 5½ million today, it required 90 million acres then and only 14 million acres now thus making available 76 million acres for the production of food for human consumption. The number of horses and mules has about reached bottom however.

2. Through research and better farming, per acre production has been increased especially during the past 15 years. Dr. Shaw has stated that agricultural production per acre will continue to increase somewhat but not at the rate of the last 15 years.

Loss of farmlands

The Soil Conservation Service reports annual loss of agricultural farmland as follows:

	Acres
Soil erosion	400,000
Water logging, soil deterioration, salting, etc	100,000
Total	500,000

The SCS is now making a nationwide survey of agricultural land losses through suburban and industrial development, municipal expansion, and the construction of airports, military, establishments and highways. It is expected that these losses will greatly exceed those shown above.

Drought

Agricultural authorities are generally agreed that one bad drought year such as we had in the thirties would wipe out our agricultural surpluses.

Reclamation

It will require 10 or 15 years and on many projects considerably longer from the time a project is authorized until it is completed and ready to produce agricultural crops.

Conclusion regarding agricultural surpluses

With our population surging ahead at a rate almost beyond our conception and the good farmland that we are losing amounting to more than a million acres per

year, the time may not be too far way when the production of adequate food will be a problem. Agricultural surpluses will be a thing of the past long before reclamation projects now being authorized can be completed.

WE'RE EATING WELL

We Americans are enjoying the highest standard of living of perhaps any people on earth. Our diet has changed tremendously within the lifetime of one generation. Too often we take for granted the availability of fresh fruits and vegetables—all high in vitamin content, especially in vitamins A and C—are now a part of our everyday diet but I doubt if the average American realizes that a very high percentage of these fruits and vegetables which come to us the year around are grown on irrigated lands of the West.

Lettuce is a part of every American citizen's diet today. Yet how many people realize that 91 percent of the lettuce which we consume every year is grown in the 17 Western States? Our Association has prepared a booklet entitled, "We're Eating Well." This booklet includes an address by Congressman A. L. Miller, a doctor who has long been interested in the subject of diet and who is well-qualified to discuss the value of certain foods as a part of our diet. This booklet contains a great deal of detailed and statistical information. It particularly points out the value of leafy green and yellow vegetables, citrus fruits, tomatoes, cabbages, and other kinds of fruits and vegetables and also shows the high percentage of these crops which are grown in the irrigated areas of the West. I am not attempting to burden the record with copies of tabulations and other information contained in the booklet but I am making a copy of this booklet available to each member of the committee. I might add, however, that much of this information was included in the statement which I submitted before the House Subcommittee on Appropriations for Public Works, and will be found on page 224 in the volume of this year's hearings on Cemeterial Expense, General Statements, General Expense, Department of the Army.

RECLAMATION REPAYS ITS COSTS TO THE NATION

Reclamation is required to show not only economic justification but financial feasibility. The costs of reclamation which are allocated to irrigation are repaid to the Federal Treasury over a period of years. The only grant to irrigation, as this committee well knows, is nonpayment of interest.

To date water users on reclamation projects have repaid $114 million into the Federal Treasury while power revenues from reclamation projects have repaid a total of $265 million. Most of the power revenues, however, have been paid within the last few years. Over a period of years, as determined by the Congress, repayment by the water users and power users will equal the costs of the project allocated to irrigation but the returns to the Federal Treasury from these sources are insignificant when compared to the returns to the Federal Treasury from income taxes and other taxes paid by the people who are living on reclamation projects and in areas and communities which are supported and maintained by these projects. It has been estimated that the total income taxes paid into the Federal Treasury from reclamation communities will repay the costs of reclamation every 5 or 6 years. The total estimated income tax receipts from reclamation communities to date will exceed the total costs of reclamation to the Federal Government— this in spite of the fact that many of the major projects have only been in full operation a few years. Furthermore it is estimated that the value of crops grown on Federal reclamation projects to date is about three times the cost of reclamation to the Government. The following tabulation is based upon statistical information from the Department of the Interior and the Bureau of Reclamation.

Cost of reclamation to Federal Government (including fiscal year 1954)	$3, 094, 000, 000
Return to Federal Government to date (1954 included):	
By water users	$114, 000, 000
By power users	265, 000, 000
By Federal taxes	4, 000, 000, 000
Total return to Federal Government, 1954 inclusive	4, 379, 000, 000
Cumulative crop values to 1953 inclusive:	
New lands (100 percent Federal)	5, 491, 638, 747
Supplemental	4, 213, 510, 246
Total crop value to 1953 inclusive	9, 705, 148, 993

GENERAL INVESTIGATIONS

General investigations constitute the heart of the reclamation program. The future of reclamation for the entire West will be determined by the extent to which the program of general investigations is carried on today. Projects investigated today will not be completed and the lands to be irrigated by those projects will not be brought under cultivation within less than 10 years and, more likely, more than 15 or 20 years or longer.

Contrary to the opinion that seems to prevail generally, we do not have an adequate backlog of reclamation projects on which surveys and investigations are completed and the project ready for construction.

We agree with the recommendation of President Eisenhower a year or more ago to the effect that we should always have an adequate backlog of projects. In order to maintain such a backlog, it is necessary that there be sufficient funds made available to the Bureau of Reclamation to carry on an adequate program of general investigations. The amount recommended by the budget and approved by the House is an increase over what we have had for the past 2 years but, in our opinion, it is still considerably short of the amount needed. In fact, if we are to be prepared as we should be to continue with a reclamation program in the West, we believe that we should have an annual appropriation for the entire West, including the Missouri Basin, totaling $10 million. The following tabulation shows the amount which has been made available for general investigations for the past several years.

Funds available for general investigation, Bureau of Reclamation

	Missouri Basin	Outside Missouri Basin	Total
1950	6,676,000	4,950,000	11,626,000
1951	7,577,000	5,635,000	13,212,000
1952	5,928,000	4,500,000	10,428,000
1953	4,850,000	4,000,000	8,850,000
1954	2,275,186	3,000,000	5,275,186
1955	2,550,136	3,559,000	6,109,136
Recommended by budget: 1956	2,500,000	5,175,000	7,675,000

Attached hereto is a list of reclamation projects together with the amount recommended by the budget which we strongly endorse. Also attached is a statement showing projects which were not approved by the Bureau of the Budget but which are endorsed by the National Reclamation Association.

On behalf of the National Reclamation Association, I wish to express our appreciation for the splendid cooperation which we have received from this committee.

Respectfully submitted.

WILLIAM E. WELSH,
Secretary-Manager.

RESOLUTION NO. 1. AUTHORIZATION AND APPROPRIATIONS FOR CONTINUED RECLAMATION PROGRAM

Whereas it is an indisputable fact that water is the lifeblood of municipal, agricultural and industrial existence; and

Whereas remaining undeveloped water supplies are limited in amount, erratic in availability, requiring major storage for control, and located long distances from necessary points of use; and

Whereas continuous conservation, development and utilization of the water resources of the States of this Nation are necessary to the growth of the Nation and must keep pace with the increase in population and with the needs of the Nation; and

Whereas the reclamation States will provide expanding markets for eastern goods and be called upon to absorb a large share of the increase in population in the United States for years to come because of the location of needed and newly discovered raw materials in the area and the ever-present necessity for the decentralizing of industry in the interest of national defense; and

Whereas the Federal Government, since its inception, has recognized its responsibility in the support of improvements resulting in public benefits, including the Reclamation Act of 1902 and subsequent legislation relating to the development and construction of major multiple-purpose water use projects; and

Whereas planning and construction of projects for such conservation, development, and utilization must be carried forward in keeping with the increasing needs of the Nation; and

Whereas the development of plans and the construction of basinwide projects for the full use of a water resource is a difficult, complicated, time-consuming process, sometimes requiring decades of effort; and

Whereas basinwide multiple use projects frequently involve many States having common interests in interstate streams; and

Whereas the magnitude and necessity of multiple use basinwide developments require joint action by the States involved and the full unanimous support of all reclamation States; and

Whereas if the great local, regional and national benefits from reclamation are to be realized, those interested in such benefits must make every effort to resolve any differences in the interest of the full development of the national water and power resources; and

Whereas opposition even exists to the basic principles of Reclamation development in many areas and there is a demand on the part of some to bottle up the remaining undeveloped resources of the West: Now, therefore, be it

Resolved, That:

1. The National Reclamation Association vigorously reaffirm its position in support of the basic principles of reclamation accepted as national policy for more than 50 years, namely, the use of interest-free money for the irrigation features, the use of power revenues to help pay the cost of reclamation and the inherent right and obligation of the people of the reclamation States to develop fully their water and power resources.

2. The reclamation States, through the directors of the National Reclamation Association, be urged to maintain closed ranks and vigorously and unanimously support a reclamation program designed to fully develop the land and water resources of the reclamation States within the limit of available water supplies.

3. The National Reclamation Association bring to the attention of the President and Congress the extent to which the national welfare and available expanding markets will be impaired and curtailed if the Federal reclamation program is not expanded.

4. The National Reclamation Association bring to the attention of the President and the Congress the urgent need for authorization of new projects which will develop, control, conserve and utilize the water resources of the reclamation States.

Resolution No. 5. Supplemental Water Projects

Whereas in many localities throughout the West, established farming areas are facing curtailment of their future operations by reason of deficient or failing water supplies; and

Whereas in such communities hundreds of millions of dollars of investments are in jeopardy: Now, therefore, be it

Resolved, by the National Reclamation Association, reaffirming its past expressed policy, That adequate consideration be given in the preparation of investigations and reports by all Federal, State and local agencies to projects for furnishing supplemental water to areas now inadequately supplied.

Resolution No. 12. Adequate Appropriations for Water Development

Whereas the primary objective of the National Reclamation Association is the complete development of the land and water resources of the West; and

Whereas the accomplishment of this objective calls for adequate appropriations by the Congress: Now, therefore, be it

Resolved, That the National Reclamation Association hereby directs its officers to support before the Congress requests for sufficient appropriations to:

(*a*) Permit the Bureau of Reclamation and the Corps of Engineers to continue progressive construction programs in consonance with the needs therefor;

(*b*) Support acceleration of the Forest Service program of revegetation, watershed restoration, range improvements, and physical improvements of national forests;

(*c*) Support and continue the snow surveys and streamflow forecasting of the Department of Agriculture;

(*d*) Permit prompt and continuing acquisition, publication and distribution by the Geological Survey of basic data respecting both streamflow and ground water resources throughout the Nation:

(*e*) Permit completion of standard topographic mapping of the United States, if possible, by the year 1970;

(*f*) Support and accelerate the program of the Soil Conservation Service to provide more adequate assistance to the soil conservation districts;

(*g*) Support research, investigation, and action programs in soil and water conservation, basic and essential to the sound development and full continued care of the Nation's land and water resources basinwide and in harmony with multiple-use projects development;

(*h*) Support the land capability inventory to be completed as soon as practicable;

(*i*) Support collection and dissemination of basic meteorological data by the United States Weather Bureau;

Be it further resolved, That the various affected States are urged to give full support to the foregoing program.

Resolution No. 23. Appropriations for Reclamation Planning

Whereas reclamation development requires sound planning and investigation ahead of the actual construction of projects; and

Whereas the rate of planning of such work is lagging behind the rate of construction: Now, therefore, be it

Resolved, That the National Reclamation Association urge and actively work for the annual appropriation of approximately $10 million to carry on needed planning of reclamation projects by the Bureau of Reclamation.

List of Bureau of Reclamation Construction and Rehabilitation Projects Showing the Amount Recommended by the Bureau of the Budget

(The National Reclamation Association endorses these projects and the amount recommended by the Bureau of the Budget with one exception. We recommend that the Roza division of the Yakima project in Washington be increased from $75,000 to $150,000.)

Allotments, construction and rehabilitation

State and project	*Recommended by Budget*
Arizona:	
Gila	$3, 500, 000
Yuma-auxiliary	408, 000
Arizona-California: Palo Verde diversion	1, 985, 000
Arizona-California-Nevada: Parker-Davis	1, 390, 000
Arizona-Nevada:	
Boulder Canyon	200, 000
Boulder City	50, 000
California:	
Central Valley	14, 000, 000
Santa Maria	1, 000, 000
Solano	13, 000, 000
Colorado: Colorado-Big Thompson	2, 100, 000
Idaho:	
Michaud Flats	520, 000
Minidoka-North Side pumping	2, 200, 000
Palisades	9, 000, 000
Montana-North Dakota: Fort Peck	325, 000
New Mexico:	
Carlsbad	1, 171, 000
Middle Rio Grande	[1] 8, 800, 000
New Mexico-Texas: Rio Grande	40, 000
Oregon: Deschutes, north unit	274, 000
Utah: Weber Basin	10, 895, 000
Washington:	
Chief Joseph Dam, Foster Creek	631, 000
Columbia Basin	12, 500, 000
Yakima-Kennewick	3, 000, 000
Yakima-Roza	75, 000
Wyoming:	
Eden	800, 000
Kendrick	750, 000
Riverton	300, 000
Shoshone	300, 000

[1] This includes $5,300,000 for the purchase of bonds.

Allotments, construction and rehabilitation—Continued

State and project	*Recommended by Budget*
Various:	
Missouri River Basin project:	
Bostwick division, Nebraska-Kansas	$6,784,000
Frenchman-Cambridge division, Nebraska	1,500,000
Glendo unit, Wyoming	6,000,000
Hanover-Bluff unit, Wyoming	1,250,000
Heart Butte unit, North Dakota	200,000
Helena Valley unit, Montana	3,000,000
Kirwin unit, Kansas	1,400,000
Lower Marias unit, Montana	6,500,000
Rapid Valley unit, Wyoming-South Dakota	490,000
Sargent unit, Nebraska	3,300,000
Transmission division, various	16,480,000
Webster unit, Kansas	3,500,000
Drainage and minor construction	500,000
Subtotal	50,904,000
Investigations	2,500,000
Other Department of Interior agencies	2,550,000
Total, Missouri River Basin project	55,954,000
Rehabilitation and betterment of existing projects	2,125,000
Drainage and minor construction	348,000

PROJECTS AND UNITS OF PROJECTS NOT APPROVED BY BUREAU OF THE BUDGET BUT ENDORSED BY NATIONAL RECLAMATION ASSOCIATION

TALENT DIVISION

Rogue River project, Oregon, $2 million

The Talent Division of the Rogue River Basin project was authorized for construction during the last session of the Congress. It is located in south-central Oregon. This is a very urgently needed project. It will provide supplemental water for the Talent, Medford, and Rogue River Valley Irrigation Districts in Oregon together with a powerplant and the enlargement of the Talent Irrigation District to include more than 8,000 acres of new land. The estimated cost of the project is $21,065,000. The irrigation allocation is $10,500,000. Water users will repay $5,592,000 in 50 years. Power will repay its allocation of $10,100,000 in 50 years with interest and in 10 additional years or a total of 60 years power will repay the remaining reimbursable project costs.

ROZA POWERPLANT

Roza Division, Yakima project, Washington, $450,000

We urge that the appropriation of $75,000 recommended by the Bureau of the Budget be increased to $450,000. There are two reasons why the construction of this powerplant is very urgent and important. The Federal Government has already invested more than $3 million in this project which, under the terms of the existing contract, is assigned for repayment through power revenues. The only way in which these power revenues can be made available to repay this $3 million is through the construction of the proposed powerplant. Second, the powerplant will bring much-needed relief to the settlers on the Roza Division of the project. We are told that the construction of the powerplant, in addition to repaying the costs to the Federal Government, would reduce the power rate to the water users on the project from 3.25 mills per kilowatt-hour to 2.75 mills per hour. This is indeed an important item to the water users. We are advised that following the outbreak of World War II construction of the irrigation facilities of the Roza Division were pushed to completion as a war food project, but due to the scarcity of critical materials the powerplant was again deferred with the result that the entire irrigation system exclusive of the powerplant but including all of the project pumping plants and associated substations and transmission facilities were completed.

MIDDLE RIO GRANDE PROJECT

Purchase of bonds, $5,300,000

Public Law 516, 81st Congress (64 Stat. 170) authorized the purchase of the outstanding bonds of the Middle Rio Grande Conservancy District by the United States in accordance with House Document 243, 81st Congress. A repayment contract with the district was executed September 24, 1951, providing for retirement of the bonds and acquisition of title to project works by the United States in order to protect the Government's proposed investment in the rehabilitation of the project and insure repayment to the Treasury.

The Middle Rio Grande project was designed to afford financial relief from the interest component of the bonded debt; permit an urgently needed revision in the assessment plan; and initiate rehabilitation of the physical properties on a reimbursable basis.

The further delay in the purchase of these outstanding bonds will detrimentally affect the feasibility of the original project as authorized by Congress, and make impossible the correction of the assessment procedure. A fuller discussion of this inequitable assessment problem appears on page 190 of House Document 653, 81st Congress, 2d session.

Purchase of the bonds now will save about $185,000 per year in interest charges. The repayment to the Government of the maximum amount of $18 million (including bonds) begins upon completion of rehabilitation. If repayment is assumed to start in 5 years, the district will save over $900,000 which will be applied to repayment to the Government. The bonds to be retired amount to $6,700,000. The guaranty fund accumulated by the district now contains $1,400,000 and will be deposited in the Treasury. Hence, the net cost to the Government of acquiring the bonds will only be $5,300,000. In addition to the above, we recommend $3,500,000 for construction.

GENERAL STATEMENT

Mr. WELSH. And then I will comment just very briefly on a few points that I think are of special interest at this time.

First, I want to say that I am sure I speak for our members, at least a large percentage and I think probably nearly all of them, in saying that we appreciate very much the action taken by the House in restoring the appropriations to the amounts which were recommended by the budget on construction and rehabilitation and also on general investigations.

GENERAL INVESTIGATIONS

I would like to say just a word on general investigations.

On page 6 of my statement, Mr. Chairman, I have listed the amount of the appropriations for general investigations, both within the Missouri Basin and outside the Missouri Basin, for the past 6 years, beginning with 1950 and down through to the present time. You will notice that the total for general investigations, including both Missouri Basin and outside, was running around $11 million, $13 million, and $10 million, and then it started sliding down and in 1954 it got down to $5,275,186. It went up a little bit last year, and the budget recommendations this year bring it up to $7,675,000.

I am sure that I hear more discussion and more interest in the item of general investigation than probably any other item having to do with the reclamation program; everyone who is interested in that program in the West realizes that general investigations is the very heart of the future. If we reduce the funds for general investigations now, we affect our reclamation program for the future.

Chairman HAYDEN. There is another thing. If the amount of money for that purpose were stabilized, then the Bureau of Reclama-

tion, like the Corps of Engineers—they are in the same fix as far as the general investigations that they conduct are concerned. If you have a fluctuating sum, the skills, the capable engineers, that gain experience in the work, can stay on the jobs and do them. But not if they are down one year and up another. I don't think there are any better engineering organizations anywhere in the world than those two organizations.

Mr. WELSH. I don't either. That, I think, is absolutely true. Our general investigation program, which must depend upon men who are highly skilled and well qualified, who know the field of reclamation, absolutely cannot be carried forward on a stop-and-go basis, because the first time that a cut is made, a lot of the good men are gone, and when they are gone once, it is pretty hard to ever get them back again.

Chairman HAYDEN. Under present conditions, private industry absorbs them, and then you cannot get them back.

Mr. WELSH. That is right.

So in the interests of our reclamation program for the entire West, I want to say that we do appreciate the increase which was recommended by the Bureau of the Budget. But we really believe that our goal, just as soon as we can get there, should be to get that total amount back up to where it was in 1950 and 1951 and 1952, so that we can carry on a program of general investigations that the people of the entire West want.

Chairman HAYDEN. We all hope there will never be another depression like the one we had. But when it came we had to find work for the unemployed. In 1933 Congress appropriated what was considered to be a very large sum of money—some $3,200 million, if I recall rightly, which would be about $10 billion now, the way our money is counted. But when Congress appropriated that money, it thought it would be put into substantial revenue-producing projects, that is, projects that would add permanently to the wealth of the Nation. However, there were no plans, no investigations, and the result was that when we went into the WPA, we fixed up schoolhouses and fixed up roads and did other things that were maybe not as great revenue sources as if you had developed a natural resource. And in the end we spent more money on WPA than we did on the real construction projects, simply for lack of plans.

For that reason, we ought to be planning ahead now. I hope there will never be another time of that kind, but whether there is or not, the plans are necessary.

Mr. WELSH. That is right. We feel absolutely that way about it.

I know the situation that you point out. That was exactly what took place in Idaho, where I was at that time. We had to put men to work at less desirable projects, because our really constructive and worthwhile projects were not surveyed and authorized and ready to go.

BACKLOG OF RECLAMATION PROJECTS

Contrary to the general opinion, we do not have an adequate backlog of reclamation projects. I have the list here of the projects that are authorized, a list that was furnished to me some 6 weeks ago by the Bureau of Reclamation. And the backlog of authorized projects that are pending totals just six. That is, assuming that the projects

which are listed within the budget recommendations are going to be started now, there will be six remaining authorized reclamation projects which are pending, and that is all.

Then, of the projects that have been transmitted to the Congress, there may have been some—I believe there was, but I can't recall the name—just in the last 2 or 3 weeks. But I have on this list four. So we do not have a backlog of reclamation projects ready to go.

I know there are a good many people over the country who think that the situation is otherwise, but that is the condition.

Chairman HAYDEN. I think there is a certain amount of confusion between the backlog of authorized reclamation projects and the backlog of river and harbor and flood-control projects.

Mr. WELSH. I know that is true. Yes, sir.

Chairman HAYDEN. There is a greater number of them.

Mr. WELSH. That is right; yes.

Chairman HAYDEN. Would you mind putting those figures in the record?

Mr. WELSH. I would like to get that list and furnish them.

Chairman HAYDEN. Very well.

(The information referred to follows:)

STATEMENT SHOWING LIST OF RECLAMATION PROJECTS SUBMITTED FOR RECORD BY WILLIAM E. WELSH, SECRETARY-MANAGER, NATIONAL RECLAMATION ASSOCIATION, AT THE REQUEST OF CHAIRMAN HAYDEN

STATUS OF RECLAMATION PROJECTS

A. Authorized projects not yet started (other than Missouri River Basin and Central Valley, Calif., units):

1. Canadian River project, Texas
   Almost entirely municipal water.
2. Collbran project, Colorado
   This project will probably have to be revised to meet local situation.
3. Minidoka project, Idaho
   American Falls Power Division
   Almost entirely power.
4. Provo River project, Utah
   Deer Creek powerplant
   Almost entirely power.
5. Rogue River Basin project, Oregon
   Talent Division
   Multipurpose, primarily irrigation.
6. Rehabilitation of Medford and Rogue River Valley Irrigation Districts.
   Entirely irrigation.
7. Santa Margarita project, California
   This project cannot go ahead until a question of water rights is settled.

NOTE.—The above list does not include the five new starts which were recommended by the Bureau of the Budget and included in the appropriation bill which was passed by the House. It is assumed that these five so-called new starts will be approved by the Congress, and that work will start on each of them very shortly.

B. Reports transmitted to Congress under present administration but not authorized.

1. Canton project, Oklahoma
   This project will require assistance from flood control, in order to establish financial feasibility.
2. Colordao River storage project and participating projects, Colorado, New Mexico, Utah, Wyoming, and Arizona
   Multipurpose basinwide project.
3. Fryingpan-Arkansas project, Colorado
   Multipurpose, primarily irrigation.
4. Washita Basin project, Oklahoma
   Municipal and irrigation.

NOTE.—This list does not include reports on units of the Missouri River Basin nor units of the Central Valley, Calif., project, which have been submitted to the Congress.

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TRANSFER OF FUNDS

Mr. WELSH. Then I would like to add our endorsement to the proposition that was considered in the House. And there seems to be not at least a unanimous agreement as to what the result is. It is with respect to the transfer of $2,085,000 from the project in Montana, where $4 million was intended to go into general investigations in the Missouri Basin, $2,120,000 into the Glendo, and I think $2,190,000 into the Hanover Bluff. There does not seem to be unanimous agreement—I have talked with several men in the Bureau and other places—as to which the final action of the House might be with respect to that. And we would like to endorse that transfer that was recommended in that letter by Assistant Secretary Aandahl to the House committee, which included $415,000 for general investigations.

Chairman HAYDEN. We have requested the Bureau of Reclamation to firm up its statement in regard to that in the record, and they will do that.

OPERATIONS AND MAINTENANCE

Mr. WELSH. Now, with respect to Operations and Maintenance, maybe I should be hesitant to disagree with the findings of the House committee, but I find it impossible to go along with the conclusions in the statement and the report referring to negligence on the part of the Bureau of Reclamation in not turning over projects to the settlers. I have been in irrigation work (not with the Bureau of Reclamation) since World War I, and I have followed it very closely out in that Northwest country before I came down to Washington. I have been here now 6 years. And it is my feeling that the Bureau of Reclamation has consistently endeavored to turn over to the settlers the operation of the projects just as soon as satisfactory arrangements can be worked out with the settlers. The Boise project was turned over in 1926.

I attended the ceremony here 2 or 3 years ago, when the Owyhee project was turned over to the settlers and the Black Canyon project was turned over to the settlers. It was completed just a few years ago. And I feel that they are making an effort to do that wherever it can be done. There are some cases where it cannot.

EFFECT OF HOUSE REDUCTION

And I think, too, that the cut of $500,000 that was included in the House bill passed by the House, since that is all going to come out of Irrigation, will be detrimental or will have a damaging effect on some of our irrigation projects.

As I understand it, out of the $24 million that is included for operation and maintenance, only $5 million of that is for irrigation. And if the $500,000 cut is put into effect, that is practically a 10 percent cut of the amount that is made available for the operation and maintenance. Furthermore, that is not an appropriation. It is merely an advancement of money, which is immediately returned to the Treasury.

Chairman HAYDEN. You agree that as far as the American taxpayer is concerned, a cut in the operation and maintenance on the irrigation projects saves him nothing.

Mr. WELSH. That is right. I do, yes.

Chairman HAYDEN. It is my understanding that there is always, when the time comes to make up a budget, an agreement between the water users on a project and the reclamation service, that a certain sum of money is needed to operate for the following year.

Mr. WELSH. That is right.

Chairman HAYDEN. And the water users agree then and there to repay that within the year.

Mr. WELSH. That is right, yes.

Chairman HAYDEN. And if they do not pay, they do not get any water.

Mr. WELSH. That is right.

Chairman HAYDEN. So it is one of those debts that is just sure to be collected. There is not a chance to lose anything on it at all. And I know down in my country, if a water user does not pay, he has a lock put on his gate, and he does not get any water until he pays up. That is a very simple way of insuring collection. And the man has to have water, of course, to grow his crops.

So I think it is a mistake due to misunderstanding on the part of the House that if they made a cut they would be actually benefiting anybody who is a taxpayer. Because they would not. On the other hand, they are doing an injury to the water users, who are perfectly willing to see to it that that money gets back into the Treasury within 1 year.

Mr. WELSH. That is right. And I think it would be crippling and would have a crippling effect on the operation of some of the irrigation projects in the West if that cut were put into effect.

I hope to get a more complete study and record of the Bureau's activities with respect to turning over the projects, but from my observations, and I have gone into it in the past, I really feel that they have done as well as any organization could under the circumstances.

Chairman HAYDEN. By direction of the committee, the Bureau of Reclamation has made a record that is complete in that regard and that shows a very substantial compliance with the request of the House. A factual demonstration I am sure would be helpful to us.

Mr. WELSH. Mr. Chairman, there are several other points, but I will not go into them now. One, that I have covered in my statement very briefly, deals with the question of agricultural surpluses and our growing population and the amount of farmland that we are losing annually. I think those questions have all been pretty well covered on a number of occasions in the past. I refer to them only briefly in my statement.

CHANGE IN AMERICAN DIET

Another thing, Mr. Chairman, I will only mention briefly. This may be like carrying coals to Newcastle, to you. But it is a booklet which just came off the press this morning, in which a man working in our office has cooperated with Congressman Miller. I am making them available to members of the committee. It deals with a subject that I do not believe is realized by most people—the tremendous change that has taken place in our diet within the last 20 or 25 or 30 years—and that is largely taken for granted by the American public. I doubt if they stop to figure out or realize where most of

those vegetables and fruits, which are such an important part of our diet today, are coming from. But a very, very large percentage of those are coming from the irrigated West. That is brought out in this little booklet which I just presented to you.

One thing in particular: I doubt if there is a day but what we have one meal in which lettuce is a part of the salad. The tabulation, I noticed a few moments ago, is not included in that booklet. But the figures which I have from the Department of Agriculture show that out of the 6 seasons, early and late spring, early and late fall, winter and summer, there is only 1 season when the major part of the lettuce comes from the rest of the country. That is late spring, right now. The rest of the season, the percentage ranged from 82 to 95 and 96 percent that comes from the irrigated West. I think that is something that is very important, because reclamation and irrigation is really making a contribution to our diet and to the health of the Nation, something which should be brought to the attention not only of this committee, but of the country in general.

Now, with respect to the projects which we are supporting, they are shown in the back of my statement. As to the projects which were approved by the Bureau of the Budget, there is one starred in that list, the middle Rio Grande, and that item was increased over the amount which was recommended by the original budget recommendation, to include funds for the purchase of the bonds.

Then, in addition to the projects which are approved by the Bureau of the Budget, there are three listed here. One was the Middle Rio Grande, but that was later approved by the budget. And there are two others which we are endorsing. One is the Talent division of the Rogue River project in southern Oregon, and the other is the pumping plant on the Roza division of the Yakima project.

The statement supporting our position is included in my material.

Thank you very much, Mr. Chairman, for the privilege of appearing.

YELLOWTAIL DAM JUSTIFICATIONS

(See p. 341)

Chairman HAYDEN. Earlier in the hearings, the Bureau of Reclamation was requested to submit justifications in connection with the Yellowtail Dam. Those justifications will be included in the record at this time.

(The justifications referred to follow:)

CONSTRUCTION AND REHABILITATION

MISSOURI RIVER BASIN PROJECT, YELLOWTAIL UNIT, MONTANA-WYOMING

Summarized financial data

Estimated total obligations		[1] $95,465,183
Total obligations to June 30, 1954		2,275,183
Total obligations, fiscal year 1955		
Allotment, fiscal year 1956	$3,500,000	
Total obligations, fiscal year 1956		3,500,000
Balance to complete		[1] 89,690,000

[1] Includes $1,500,000 for payment to Crow Indians, subject to modification by the Congress.

JUSTIFICATION OF ESTIMATE

Location

The proposed Yellowtail Dam will be located at the mouth of the Bighorn Canyon, 45 miles southwest of Hardin, Bighorn County, Mont.

Description

Yellowtail Dam will provide a reservoir with a capacity of 1,375,000 acre-feet. Construction of the dam will regulate runoff for irrigation, flood control, power generation, and other uses. Storage allocations will include a minimum of 250,000 acre-feet to be used solely for flood control, with an additional 9,000 acre-feet as an operating margin allowance and 250,000 acre-feet for joint use for flood control and conservation. The conservation portion of the joint use storage will be used mainly for irrigation and power generation. All water releases except spillway discharges will be made through the powerplant at the toe of the dam, which will have an installed capacity of 200,000 kilowatts.

Repayment

Repayment will be made from sale of electric energy. Any surplus revenues from power will be credited to the Missouri River Basin project as authorized. Substantial benefits will be provided for fish and wildlife, recreation, municipal-industrial water, and sediment control.

Status

The total estimated cost of the Yellowtail unit has been decreased from $115,494,000 to $95,721,000 (anticipated total obligation, $95,465,183) because of changes in design and the firming up of quantities. A definite plan report has been prepared and approved. As of June 1955, detailed designs on the dam, powerplant, and access roads are well advanced.

Work proposed, fiscal year 1956

The program for fiscal year 1956 provides for completion of designs and specifications and the award of construction contracts for the construction camp, access road, dam, powerplant, and switchyard.

Justification

The early construction of Yellowtail unit is important for irrigation, flood control, and electric power. Other important benefits include silt retention, improvement of fish and wildlife resources, and recreation.

The Yellowtail powerplant will serve the areas of northern Wyoming, eastern Montana, and western North Dakota. By virtue of existing and proposed interconnections between major Bureau transmission systems, it will also be possible to utilize Yellowtail power in augmenting power supplies in southern Wyoming, and in the eastern portion of the Missouri River Basin.

In this area, agriculture, mining, and industry are the principal economic activities. In recent years, the production, transportation, and refining of petroleum has assumed major proportions and its rapid expansion is continuing. Northern Wyoming has long been a substantial oil producing area and the Williston Basin, a large part of which is located within the market area for Yellowtail power, promises to become one of the major oil producers in the Nation. The area also contains a large variety of minerals and coal reserves. Favorable sites for synthetic liquid fuel plants offer prospects for large power loads.

Present power requirements in the Yellowtail area, excluding exports but including reserve requirements, have been estimated at 559 megawatts. A minimum increase of 5 percent per year in these requirements can be expected. The estimated shortage of power by 1960 will require the full capacity of 3 units of the Yellowtail powerplant with the fourth unit required about 1 year later.

Montana also needs more irrigated land. It cannot provide itself with sufficient hay and alfalfa to carry its livestock, nor has it means to provide adequate dairy products or vegetables without irrigation. A severe winter reduces its livestock numbers or requires the importation of feed. A protracted drought period completely wipes out all agriculture in the area of drought. More irrigated land is essential to support the economy of the State and the Yellowtail unit contributes substantially to the fulfillment of this requirement in that it is an integral part of the overall plan for development of natural sources of the Missouri River Basin. The unit is virtually indispensable to development of the Hardin unit located along the Bighorn River, as well as numerous proposed pumping units along the Yellowstone.

LETTER FROM GOVERNOR SIMPSON OF WYOMING

Chairman HAYDEN. I would like to have included in the record at this time a letter from Hon. Milward L. Simpson, Governor of Wyoming, in which he requests that funds be provided for the initiation of construction of the Owl Creek unit of the Missouri River Basin project. The letter will be included in the record.

(The letter referred to follows:)

WYOMING,
EXECUTIVE DEPARTMENT,
Cheyenne, June 17, 1955.

Re Owl Creek unit, Wyoming.

Hon. CARL HAYDEN,
Senator from Arizona,
Senate Office Building, Washington, D. C.

DEAR SENATOR HAYDEN: One of the important projects for north central Wyoming is this Owl Creek project which I understand is being opposed for approval. If this $900,000 initial allocation for this project could be put on in the Senate, it would expedite, rather than longer delay, the necessary work to bring supplemental water to this retarded area.

For your information, the Big Horn Basin, wherein the Owl Creek is located, produces 40 percent of the agricultural produce in the entire State of Wyoming. The five counties in the Big Horn Basin have some of the most fertile and productive soil in the entire State. The planning on this project has been completed. The initial construction can be started with the allocation above referred to. The repayment contract has already been reviewed and approved. The only thing now lacking is approval and inclusion in the appropriation. There has been some vague talk, especially in the Cannon committee in the Lower House, that there were engineering problems involved in this project. Approximately half a million dollars have been spent by the Bureau of Reclamation investigating this project from every standpoint. That report is in published form and can be procured through the United States Bureau in Washington. It proves not only the availability of the water, but the feasibility of the entire project, and the capability of the soil to receive the water and produce.

I know it would be a severe blow to that area if this small allocation were not included in this year's appropriation.

Our congressional delegation is very conversant with this entire project and can brief you more fully with respect to it. I am sending each of them a copy of this letter with the hope that they will contact you in person.

Sincerely yours,

MILWARD L. SIMPSON, *Governor.*

LETTER FROM SENATORS KERR AND MONRONEY

GENERAL INVESTIGATIONS

Chairman HAYDEN. I have received a letter from Senators Kerr and Monroney concerning the funds for general investigations by the Bureau of Reclamation, in the Arkansas-White-Red River Basins. Also a letter from Hon. Raymond Gary, Governor of Oklahoma on the same subject. These letters will be included in the record.

(The letters referred to follow:)

UNITED STATES SENATE,
COMMITTEE ON PUBLIC WORKS,
June 15, 1955.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
Washington, D. C.

DEAR CARL: The House public works appropriation bill, Report No. 747, contains language, if we rightly interpret it, which would be very detrimental to the reclamation program in Oklahoma. We refer to pages 7 and 8 of the report, as follows:

"BUREAU OF RECLAMATION

"GENERAL INVESTIGATIONS

* * * * * * *

"All new starts in the Arkansas-White-Red River Basin have been deleted until such time as the comprehensive survey of this basin is available for further study."

We are advised by Mr. R. W. Jennings, Regional Director, Bureau of Reclamation, Amarillo, Tex., that if the language remains in the report and is not amended or deleted by the Senate, the only action the Bureau of Reclamation can take will be to discontinue the Area Planning Office of the Bureau of Reclamation in Oklahoma.

The Area Planning Office of the Bureau of Reclamation Office in Oklahoma is and has been for the past 15 years supported financially by the State of Oklahoma through appropriations made by the legislature in amounts varying from $7,500 annually upward. In addition, the State of Oklahoma has furnished to the Bureau of Reclamation equipment, personnel, and at one time office space, in order that the work of the Bureau in investigating the feasibility of reclamation projects in Oklahoma would be on a Federal-State cooperative basis. This Office has operated very effectively, and the State of Oklahoma is well pleased with the quality and quantity of work they have produced.

In the hearings before the Public Works Subcommittee on Appropriations of the House, beginning page 485, Central Section, part I, the justification for certain survey projects indicates that 4 proposed surveys totaling $112,000 would be affected by the language in the House report. It is for this reason that the Oklahoma office of the Bureau of Reclamation would be forced to close. The projects listed are as follows:

Lawton-Duncan project	$50,000
Liberty Bottoms project	20,000
Mangum project	30,000
Webber Falls project	12,000

The remaining survey work now in progress and not completed would not justify the Bureau of Reclamation maintaining the office in Oklahoma.

We are sure the question in your mind arises, What would be the effect of the closing of the Oklahoma office? It would merely mean that the technical staff which have worked together in that office for 15 years would be dispersed and that next year or the year following, an office would have to be reorganized for Oklahoma to take care of the surveys listed in this year's justification, plus such other surveys as may be ready for general investigation at a later date. Thus, the expense of dismantling the office and reestablishing it at a later date would be far greater than the amount of money that would be required to authorize the surveys above listed for this fiscal year. The other work now in progress by the office would of necessity be carried forward from either Amarillo or some other area planning office, at greater expense than it can be accomplished by the forces now working on them.

After reading the testimony, it appears that the House committee consider that since the Arkansas-White-Red Interagency Basin report is nearing completion and will be submitted to Congress this year, it is a duplication of expenditures to make general investigations of the projects in question. The truth of the matter is that the Arkansas-White-Red Interagency Basin Committee report has served as a preliminary investigation and justifies project planning as contemplated by the Bureau of Reclamation through the facilities now available at Oklahoma City.

We refer also to the testimony of Secretary Aandahl on page 159 of subcommittee hearings, General Statements. On page 160 of the hearings Secretary Aandahl submitted for the record Statement of Arkansas-White-Red Basin Investigation Program, which sets forth ample justification for the making of the appropriations necessary to carry on the work contemplated by the area planning office at Oklahoma City.

We are advised that the Governor of the State of Oklahoma and the Oklahoma Planning and Resources Board are very much concerned about this matter and probably will correspond with you.

We urgently request that your committee consider carefully this matter and delete the action taken by the House subcommittee and recommend the appropriation of sufficient funds for new-start surveys to maintain the Oklahoma City office of the Bureau of Reclamation.

Sincerely yours,

ROBERT S. KERR,
United States Senator.
A. S. MIKE MONRONEY,
United States Senator.

STATE OF OKLAHOMA,
OFFICE OF THE GOVERNOR,
Oklahoma City, June 16, 1955.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations, United States Senate,
Senate Office Building, Washington, D. C.

DEAR SENATOR HAYDEN: Pursuant to my telegram of yesterday, the effect of the position taken by the House Appropriations Committee regarding the discontinuance of providing funds for investigation by the Department of the Interior and new starts in the Arkansas, Red, and White River Basins gives our people in Oklahoma considerable concern. At the outset, may I advise you that Oklahoma has cooperated by providing funds for the operation of the Planning Office of the Bureau of Reclamation located in Oklahoma since 1939 and is still doing so. We do not presently have any projects that have been advanced to the construction stage. Our projects in general are still in investigation status. Continuation of investigation of projects is urgently needed to permit an orderly prosecution of the necessary program of water-resource development.

I am informed by Representatives of the State of Oklahoma who participated in the preparation of the AWR report that the project evaluations contained in the AWR report are, almost without exception, based on preliminary or reconnaissance data and studies. The urgency and magnitude of the needs that would be served could not be adequately evaluated at the time these studies were made, and in most cases, the engineering and economic studies contained in the report do not provide sufficient basis for requesting project authorization and appropriation of funds. In effect, then, the AWR report identifies needs without conclusively evaluating them, outlines various projects which would provide solutions for those needs, and enumerates the further and continuing investigation necessary for ultimate realization of the projects included in the AWR plan.

The preliminary studies made for the AWR report showed that certain projects should be developed as soon as practicable. The more detailed investigations for some of them, such as the Norman project, Oklahoma and the Wichita project, Kansas, have been prosecuted by the Oklahoma Office of the Bureau of Reclamation concurrently with preparation of the AWR report. In other cases, the items in the Bureau of Reclamation on program for the fiscal year 1956 have been specifically selected to meet the needs and desires of the people of Oklahoma. These desires have been expressed through local organizations, members of the legislature, and our Representatives in Congress. In keeping with the desires of our people, the program includes provisions for investigation of the Duncan-Lawton (Waurika Reservoir), Mountain Park, Mangum, Webbers Falls, and Liberty Bottoms projects. In addition, in the last 30 days there has arisen need for investigation of project possibilities in Sequoyah County. It would be definitely adverse to the interests of the State of Oklahoma to delay investigations of urgently needed development of water resources simply because of an erroneous conception that seemingly prevails concerning the contents of the AWR report. As indicated above, that report does not contain specific recommendations for construction of all projects that will be needed during the next 20 or 25 years; rather it points out the need for further investigations in almost all cases.

I earnestly urge that recommendations of the committee denying appropriations of funds for continuation of investigation of projects in the AWR area be deleted, and that funds for the programed investigations be restored.

Very truly yours,

RAYMOND GARY, *Governor.*

STATEMENT OF WALTER HARRISON

Chairman HAYDEN. At the hearings yesterday, Mr. Fain of the National Rural Electric Cooperative Association, requested to submit a statement for Mr. Walter Harrison, executive secretary of the Georgia Electric Membership Corp. Mr. Harrison's statement will be included in the record at this point.

(The statement referred to follows:)

STATEMENT OF WALTER HARRISON, EXECUTIVE MANAGER, GEORGIA ELECTRIC MEMBERSHIP CORP., MILLEN, GA.

Mr. Chairman and gentlemen of the subcommittee, my name is Walter Harrison. I am executive manager of the Georgia Electric Membership Corp., Inc. Georgia EMC is the trade-service organization representing 235,000 consumer-members of Georgia's 41 rural electric cooperatives. On behalf of those cooperative members, I wish first to thank the subcommittee for permitting us to testify at this hearing.

There is one outstanding reason why we want to testify before this subcommittee. The Clark Hill multiple-purpose project constructed on the Savannah River between the States of Georgia and South Carolina has been in operation for more than 2 years, but Georgia does not receive a single kilowatt of power although the project has installed capacity of 280,000 kilowatts and it has been determined that the project shall flow 50 percent to Georgia and 50 percent to South Carolina. Under the preference clause of the Flood Control Act of 1944, we are entitled to receive our share of the energy and power to be generated at this project.

We have no transmission lines in Georgia over which we can get the power to flow to our REA cooperatives. The only lines available in Georgia are the transmission lines of the Georgia Power Co. and the Georgia Power & Light Co.

For years we have appeared before the appropriate committees of the Congress seeking transmission lines to our load centers. The power companies have desperately fought appropriations for these lines and have been successful in their efforts. They have stated that they have lines over which this power may flow. They refuse to wheel for the account of the Government of the cooperatives.

The power companies in Georgia are seeking "busbar" sale of the power allotted to Georgia in violation of the law. They cannot act as power brokers, as it is the responsibility of the Secretary of the Interior to dispose of the power generated at these projects, in accordance with the law.

The power companies have submitted various contract proposals in which the cooperatives cannot join because of the principle of ownership of preferred customers and because the economic benefits have not been properly evaluated.

At this time the Secretary of the Interior is on record as stating that no additional transmission lines are needed in Georgia, and that he is going to work out this matter with the private companies. For more than 2 years he has not worked it out and the power from Clark Hill that should be equally distributed between the States of Georgia and South Carolina is now flowing all to South Carolina.

The power potential at Clark Hill is not being fully developed and the Government is losing because of the delay in providing transmission of the power to Georgia. What power is available is being sold on a month to month basis.

We respectfully submit to this committee that something should be done by this committee and the Congress to alleviate the conditions of which we complain. The committee should appropriate sufficient planning funds with which to plan integration of the various multiple-purpose projects in Georgia and bring the electric energy to the load centers of the 41 electric cooperatives within the State of Georgia.

We should have an appropriation for planning purposes not to exceed $150,000.

MONTANA PROJECTS

(See p. 520)

Chairman HAYDEN. I have received a letter from Mr. Charles A. Murray, administrative assistant to Senator James Murray, enclosing a statement in support of funds for projects in Montana. The letter and the statement will be included in the record.

(The materials referred to follow:)

UNITED STATES SENATE,
June 21, 1955.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
United States Senate, Washington, D. C.

DEAR SENATOR HAYDEN: Senator Murray, who is attending the International Labor Conference at Geneva, Switzerland, has asked that the attached statement on Montana items be presented for him in connection with the public works appropriation bill.

I am sure you are aware of Senator Murray's deep and continuing interest in the reclamation program as a whole as well as the completion of certain flood protective works in Montana.

I know Senator Murray will appreciate having his statement inserted in the record at an appropriate point in the hearings on the public works appropriation bill.

Sincerely yours,

CHARLES A. MURRAY,
Administrative Assistant to Senator Murray.

STATEMENT BY SENATOR JAMES E. MURRAY OF MONTANA

On behalf of the people of Montana I respectfully urge the favorable consideration of the Senate Appropriations Committee on the following items in connection with the public works appropriation bill for fiscal year 1956.

YELLOWTAIL DAM

As chairman of the Senate Committee on Interior and Insular Affairs, I, with Senator Mansfield, requested Senator Anderson, chairman of the Subcommittee on Irrigation and Reclamation, to hold a hearing on the reasons for delays in initiating construction of Yellowtail Dam. This important multiple-purpose structure for irrigation, flood control, and power generation, was authorized by the Flood Control Act of 1944, and appropriations have been recommended by three Secretaries of the Interior including the present Secretary. For some inexplicable reason the Budget Bureau has persistently refused to send an estimate to the Congress although more than $2 million have been appropriated for investigation, planning, and design for this structure.

As a result of the hearing held by Senator Anderson's subcommittee on March 27, the feasibility of Yellowtail Dam has been attested to again by the Bureau of Reclamation; the Federal Power Commission has advised that there is a market for the power that would be produced at the dam, and there would seem to be no sound or logical reason for further delaying initiation of construction. In addition to Yellowtail Dam, the Hardin irrigation unit was authorized by the Flood Control Act of 1944 and is an essential development required for the stabilization of agriculture in the Hardin area.

As you have been advised, the Subcommittee on Irrigation and Reclamation on June 16 adopted a resolution urging your committee to include an appropriation to initiate construction of Yellowtail Dam. I am informed that without increasing the total budget estimate for construction and rehabilitation for the Bureau of Reclamation, unobligated funds previously appropriated to the Bureau of Reclamation can be made available to initiate construction of Yellowtail without disturbing the program for any other project. Therefore, I urge the committee to include an appropriation of not less than $3,500,000 to start construction of Yellowtail Dam.

At the same time I suggest that the committee, in its report, reassure the Crow Indian Tribe, which is concerned about fair compensation for some 7,000 acres of land which would be inundated by the Yellowtail Reservoir. This assurance should be, it seems to me, in the form of a statement that if a satisfactory settlement cannot be reached by the Secretary of the Interior, then the Crow Tribe should be enabled to maintain an appropriate action against the United States for a just compensation. It is my opinion that a majority of the Crow Tribe are anxious to have Yellowtail Dam constructed.

I will not discuss the so-called partnership plan suggested by the Bureau of the Budget until a more definite proposal is made by the power companies concerned. In any event, the dam must be constructed by the United States. While my view is that the Government should install and dispose of the power generated at Yellowtail, I see no objection to consideration being given to a partnership proposal if and when a sound proposition is made. However, the injection of the partnership proposal should not be permitted to delay further construction of Yellowtail Dam.

ADDITIONAL ITEMS IN APPROPRIATION BILL

The House of Representatives appropriated $3 million for the Helena Valley unit in Montana, and I feel sure this committee will concur in the House action. The Helena Valley unit is also an essential irrigation development that will have a strong effect on the economic and agricultural stabilization of that area of Montana.

A second construction item approved by the House is $3,675,000 to complete Tiber Dam of the Lower Marias project. Your committee has consistently supported the Lower Marias project which will have a tremendous effect on the future agricultural development of one of the most important areas in the State of Montana.

In connection with the $2,915,000 item for investigations of the Missouri Basin project, Montana has some most important considerations. The State is very much concerned with securing $90,000 for the completion of investigations in the Beaverhead Valley where the farmers are anxious to go ahead with construction of an additional reservoir.

The rural electrification organizations and other users of power in Montana and North Dakota are urging the appropriation of $325,000 for the Fort Peck project. These funds will be used for improvements of the transmission system from Fort Peck at points like Glendive, Dawson, Glasgow, and Shelby.

In connection with the drainage and minor construction item of $688,349 Montana is concerned with one item of $22,500 for drainage ditches in connection with the Crow Creek unit.

Another item in which Montana is concerned is that of $2,125,000 for rehabilitation and betterment. The Milk River project in Montana requires replacement of certain canal structures by widening the main canal where earth slides have occurred, and pipeline improvements. This work is included in the rehabilitation and betterment item.

I desire to add my commendation to the floor action of the House of Representatives in appropriating the funds recommended by the Bureau of the Budget and express the hope that the committee will find its way clear to include in its action funds for Yellowtail Dam as well as other worthy projects in the West such as the Owl Creek in Wyoming, the Talent division of the Rogue River project in Oregon, the Roza powerplant of the Yakima project in Washington, and the Deer Creek powerplant of the Provo River project in Utah. It seems to me that these five additional projects can be financed from unobligated balances and the reclamation program moved ahead together with the new starts already carried in the appropriation bill as it came from the House.

STATEMENT OF SENATOR KUCHEL

Chairman HAYDEN. Senator Kuchel has presented a statement in support of the budget estimates for certain projects in California. This statement will be included in the record. Also a letter from the Senator concerning additional investigation funds for the Ventura project.

(The statement referred to follows:)

STATEMENT OF SENATOR THOMAS H. KUCHEL IN SUPPORT OF FUNDS FOR BUREAU OF RECLAMATION

Mr. Chairman, I earnestly hope the subcommittee will concur with the final action of the House with regard to the items for construction and rehabilitation of reclamation projects because the restoration of funds previously cut from the bill by the House committee is imperative to allow continuance and initiation of vital work in California.

The budget estimate of $146,041,000, which was voted by the House, will make possible a start on one unique feature of the Central Valley project, the Delta fish-protection facilities. These are essential to protect the small fish which migrate up the San Joaquin River to spawn and are of both economic and recreational importance. The problem of preventing serious losses of fingerlings has been of great concern and under investigation for several years and this particular activity should not be postponed further.

The Interior Department also has included in the estimates approved by the budget the initial amount of $1 million to begin work on another project of unusual character. This is Vaquero Dam, on the Santa Maria project, which would replenish ground waters and counteract conditions that have led to abandonment of a substantial amount of agricultural land previously under cultivation.

The full budget item also is necessary to permit continuance of the Solano project in accordance with schedule. The effect of the action by the House was to raise from $12 million to $13 million the total for this project and the full amount is required since Monticello Dam is well along toward construction.

Work must be begun on the Putah diversion dam and the south canal, as well as completing certain work on highways in the area which soon will be needed because other roads will be under water.

Several smaller activities in connection with the Central Valley are contingent upon granting the full amount for reclamation, construction, and rehabilitation. Among these are the Corning Canal, which is a feature of the Sacramento canals unit, and the important works to carry out a new law passed by Congress last year to protect migratory game birds and growing crops through preservation of the grasslands area which is a nesting and feeding grounds on the Pacific flyway. The full budget estimate of $14 million will enable the Department of the Interior to continue the Corning construction, begin work to get supplemental water on the grasslands, and carry on extension of the distribution system in other sections of the Central Valley.

UNITED STATES SENATE,
Washington, D. C., June 20, 1955.

Hon. CARL HAYDEN,
Chairman, Senate Committee on Appropriations,
The Capitol, Washington, D. C.

MY DEAR SENATOR: I should appreciate it very much if your committee, in its report on the general investigations fund for the United States Bureau of Reclamation, Department of the Interior, would indicate approval for using such amount from this fund as may be necessary to assist the Calleguas Municipal Water District.

This district, formed one and a half years ago, serves an area embracing six fine communities in Ventura County, Calif., in which area the problem of water shortage has become extremely acute.

The Bureau, under a contract made in April 1954, has investigated the possibilities of developing a feasible supplemental water supply for the district, and will submit its report to the district this week. It has been indicated, if funds are made available, that the Bureau could proceed during the 2 years starting July 1, 1955, with the necessary feasibility report. One-half of the cost will be paid by the district.

I attach a letter dated June 7, 1955, from the district which explains in some detail the justification for the above request. I very much hope you will be able to look upon it favorably.

Very sincerely yours,

THOMAS H. KUCHEL.

CALLEGUAS MUNICIPAL WATER DISTRICT,
Moorpark, Calif., June 7, 1955.

Hon. THOMAS H. KUCHEL,
Senate Office Building, Washington, D. C.

DEAR SENATOR KUCHEL: The Calleguas Municipal Water District was formed by vote of the people in December of 1953. The district is located in the eastern portion of the county of Ventura and embraces the towns of Camarillo, Somis, Moorpark, Simi, Thousand Oaks, and Santa Susana. In April of 1954 the district entered into a contract with the United States Bureau of Reclamation to make a reconnaissance investigation and report evaluating the possibilities of developing a feasible supplemental water supply for the district. This report will be presented on the 22d of this month, and it is anticipated that one or more possible solutions to the district's water problem will be indicated.

The water-supply problem in the district is extremely critical; it is estimated that the present annual overdraft on the underground basins is about 25,000 acre-feet and that supplemental supply of 93,000 acre-feet will be needed to meet the ultimate needs of the district. Because of proximity to the Los Angeles metropolitan area a tenfold increase in population over a period of years is believed likely. The economy of the district cannot survive without an adequate water supply.

Anticipating a favorable report from the Bureau on June 22 the district expects to enter into a second contract with the Bureau on a cooperative basis on or about July1 for a feasibility report, which will cover a 2-year period and cost a total of $300,000. The board of directors of the Calleguas Municipal Water District request that you contact the Bureau of Reclamation in Washington and inform them of the contemplated action in order that it may be considered by them in setting up their budget. It would also seem expedient to inform the proper appropriation committee of the proposed action and solicit their assistance.

Your cooperation and assistance in this matter is urgently requested.

Very sincerely yours,

MONROE M. EVERETT, *Secretary.*

CAROLINA POWER & LIGHT CO.

Chairman HAYDEN. I have received a letter from Mr. L. V. Sutton of the Carolina Power & Light Co. with regard to some of the testimony presented to the subcommittee yesterday. Inasmuch as Mr. Sutton feels that certain statements were derogatory of him and his company, his letter will be included in the record.

(The statement referred to follows:)

CAROLINA POWER & LIGHT CO.,
Raleigh, N. C., June 20, 1955.

Senator CARL HAYDEN,
Chairman, Interior Department Panel,
Subcommittee on Public Works,
Senate Committee on Appropriations,
Washington 25, D. C.

DEAR SENATOR HAYDEN: I have been advised that Mr. J. A. Ward, president of the Tarheel Electric Membership Association, and Mr. William T. Crisp, manager, appeared before your committee today and made statements derogatory of the Carolina Power & Light Co. and me. I have not been advised as to just what statements were made but understand they probably left with your committee certain printed matter.

I would like for you and your committee to know that the current dispute concerns whether or not our company refuses to wheel power from Kerr Dam to membership cooperatives in eastern North Carolina in accordance with a commitment I made before your committee. You will recall that in 1952 I assured you and your committee that we were willing to wheel Kerr Dam power to the co-ops in answer to your direct questions. We have never receded from that position. Through letters and newspaper releases, the attempt was made to show that we have repudiated the commitments we made. We have undertaken to answer the false charge and to let the people know the facts. We also wish you and your committee to have the whole story.

Mr. Eric Rodgers, editor of the newspaper at Scotland Neck, N. C., recently published in his paper a letter received from Assistant Secretary of the Interior Fred G. Aandahl, which letter confirms our position. For your information and that of your committee, I am herewith enclosing a copy of the advertisement through which we gave publicity to Secretary Aandahl's letter after it was brought to our attention. I also am enclosing a copy of a news release and an advertisement which we issued following a news conference in my office June 1 on the subject.

We have just received from Secretary Aandahl a proposed contract for the transmission of Kerr Dam power to the co-ops. It is my understanding that copies of the proposed contract also have been sent to the co-ops.

I respectfully request that this letter and the enclosures be made a part of the record of your committee. I will be glad to furnish you additional information or to appear before your committee if you so desire.

With much respect and best wishes, I remain

Very truly yours,

L. V. SUTTON.

STATEMENT BY LOUIS V. SUTTON, PRESIDENT, CAROLINA POWER & LIGHT CO., RALEIGH, N. C., JUNE 1, 1955, IN RE WHEELING KERR DAM POWER

Carolina Power & Light Co. is willing to "wheel" Kerr Dam power to rural co-ops, and our lines are capable of beginning such service today.

Then, why no agreement?

The answer is simple. C. P. & L.'s efforts have been blocked by public-power advocates who, I am convinced, are more interested in extending government further into the power business than they are concerned about co-ops getting Kerr Dam power.

The main point of disagreement and delay is one we believe the public will readily understand. That is our unwillingness to put a Federal agency in the power-brokerage business by selling it our power for resale to our customers in competition with us.

Public-power advocates have insisted that we not only wheel but that we supply large amounts of additional power to the Government for resale.

We have submitted three proposals. The first would take all the power allocated to our area at the dam and distribute it at prevailing rates. This would save the Government about $180,000 a year in wheeling fees, or twice what it is claimed the co-ops would gain under the Virginia-type contract. Second, we proposed to wheel to the co-ops that portion of the power that would be allocated to them under the Virginia-type contract—and at identical rates. Our third proposal would, in effect, provide for the allocation of practically all the energy from the project available to co-ops in our area in an average year and would save the Government the wheeling fees on the steam power we supplied to the co-ops. In dry years, this saving in wheeling fees could amount to half the total wheeling costs. These proposals also would result in more taxes to the State of North Carolina than the Virginia plan.

Our offers displease the public-power advocates. I refer specifically to Mr. William T. Crisp, attorney and spokesman for the Tarheel Electric Membership Association. I also refer to the association's key negotiator and Mr. Crisp's adviser, Mr. T. Foley Treadway, whose firm, the Southern Engineering Co., of Atlanta, Ga., has engineered and supervised the building of millions of dollars of co-op transmission lines and stands to profit further if the transmission lines Mr. Crisp now advocates are built. I also refer to Mr. Crisp's incorrect and misleading statements May 19 before the Subcommittee on Public Works of the House Appropriations Committee.

Mr. Crisp is simply not telling the truth when he says our company will not wheel Kerr Dam power to the North Carolina co-ops served by our company.

In statements before congressional committees and in letters and proposals to the Interior Department, I have said that our company will wheel, transmit or carry that power at the same wheeling rate per kilowatt-hour that is paid under the Virginia contract. This offer still holds.

Mr. Crisp's figures appear to contradict themselves. He claims that 17 co-ops served by Vepco have saved over $350,000 since the arrangement began. Yet his own supporting exhibit lists savings of only $340,292. His record of kilowatt-hours purchased indicates the saving was actually $313,234. What he fails to say is that to achieve this saving to the co-ops, the Federal Government paid approximately $650,000 in wheeling charges. In other words, each dollar the co-ops saved cost the taxpayers more than $2.

The saving was two-thirds of a mill, compared with an average cost of 1.4 mills per kilowatt-hour for wheeling.

Mr. Crisp's own figures indicate the five co-ops served in Carolina (which are more comparable to those we serve) paid an average of 7.08 mills or a saving of only $23,293 since they began purchasing Kerr Dam power August 1, 1953. Compared with C. P. & L.'s present 7½-mill rate, the saving would be less than one-half a mill per kilowatt-hour. In this case, every $1 the co-ops save would cost the taxpayer approximately $3.

His statement of the amount of money the co-ops have lost is greatly exaggerated. We have records of the demands and the consumptions of these co-ops and comparing the 90 cents per kilowatt demand charge plus 4½ mills per kilowatt-hour with our 7½ mills per kilowatt-hour and no demand charge, we are convinced that the savings could not exceed $2,000 per month. This is only one-fourth of what he claims.

Mr. Crisp also fails to state that, though handling all the Kerr Dam output, including the share allocated to C. P. & L. territory, Vepco had to furnish from its steam plants and sell the Government for resale to those co-ops 46 percent of their total requirement. Had Vepco handled only two-thirds of the output, Vepco would have had to supply steam power for much more than 50 percent of the co-ops' needs.

Statements that the co-ops do not wish to buy from the power companies because the power companies would then go to the State Utilities Commission and get the rate raised are absurd. Such a contract would be an interstate contract with the Federal Government for sale of power at wholesale for resale and would not be under the jurisdiction of the State utility commission but would be under the Federal Power Commission, the same commission which regulates the rates on all power sold by Government agencies.

The Tarheel Electric Membership Association advocates "self-liquidating" transmission lines, or funds for their study. Under the Virginia contract, Interior Department now pays an average of 1.4 mills per kilowatt-hour wheeling fee for transmission. The wheeling fees in the Virginia contract are about the lowest wheeling fees in effect throughout the country and are greatly lower than the cost of building, maintaining, and operating transmission lines.

Public power advocates prefer the transmission lines, however, as part of their ambitious design. Once built, costly transmission lines would be argued as justifying Government steam plants; then the additional generating capacity would be argued as justifying more lines.

Carolina Power & Light Co. shares a common interest with the co-ops in developing the area they serve. We want to help every individual operating co-op to derive any benefits that are available to it from Kerr Dam power. But we resist the public power bloc which is seeking to erect a political power empire at the expense of the taxpayers of North Carolina and the Nation and to the detriment of our company.

LETTER FROM SENATOR KNOWLAND

THE TRINITY RIVER PROJECT

Chairman HAYDEN. I have received a letter from Senator Knowland, the minority leader—and a member of this subcommittee—concerning funds for the initiation of the Trinity River project. The Senator's duties as minority leader, make it impossible for him to be present this afternoon. His letter will be included in the record at this point.

(The letter referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,
June 21, 1955.

Senator CARL HAYDEN,
Chairman, Senate Appropriations Committee,
Senate Office Building, Washington, D. C.

DEAR MR. CHAIRMAN: Before the conclusion of the hearings being conducted by the subcommittee on the Bureau of Reclamation's public works items, I want to bring to your attention a situation that has developed during the consideration by the House of Representatives of the public works appropriation bill of 1956. An amendment was adopted on the floor of the House restoring in full the Bureau of the Budget's recommendation for funds for construction of irrigation projects already authorized or in process.

I have been advised that this action has raised some question as to funds appropriated by the House committee for the Trinity River division project. From conversations I have had with House Members, as well as a careful reading of the action taken on the floor, it was clearly not the intentions of the sponsors of the amendment nor of its supporters to jeopardize in any manner the recommendations previously made by the House committee for funds for the Trinity River project.

In order to assure that there will be no uncertainty as to the Trinity River project, I request that the Senate Appropriations Committee's report evidence that the committee concurs with the language of House Report 747, 84th Congress, which allocates $1 million of available funds to commence construction of the Trinity River division. The allocation of funds for this project can only be obligated by the Department after congressional authorization of this division.

With best regards,

Sincerely yours,

WILLIAM F. KNOWLAND.

HEART BUTTE UNIT

Chairman HAYDEN. I have received a letter from Mr. Milo W. Hoisveen, State engineer of North Dakota, concerning the Heart Butte unit of the Missour River Basin project. This letter will be included in the record.

(The letter referred to follows:)

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION,
Bismarck, N. Dak., June 15, 1955.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Public Works, Committee on Appropriations,
United States Senate, Washington, D. C.

DEAR SENATOR HAYDEN: Recently I had the opportunity of reading a portion of the hearing of the subcommittee of the Committee on Appropriations, House

of Representatives, first session. This was the portion prepared by the central section and referred to as part I.

The testimony conducted on the Western Heart irrigation project located in southwestern North Dakota was of particular interest to me. A number of questions were asked of Bureau of Reclamation officials which, in my mind, were not adequately answered to give a clear picture of the situation as it exists on this project. The following information, I hope, may be used in Senate hearings and I feel is authentic and may have bearing in securing appropriations for this project.

The cancellation of the contract to construct the portable pumping plants on this project would not, in my opinion, result in savings to the Government. It could possibly involve additional expenditures on the part of the Government and also mean a loss of much of the work that has already been in progress.

The contractor performing the work on the project will have, by July 1, completed 45 to 50 percent of the required work. He has many of the pumping plant and lateral sites opened. Money would have to be expended in closing the sites to conform with standards. Certainly the contractor would sue for much of the unexpended balance and would, no doubt, be in a favorable position to recover a large portion of the money under the contract.

From the initial analysis of the project, it would appear that the procedure of installing pumps on private land and pumping from the river is unique. However, this is not setting a precedent. The Heart River is being used as a canal and eliminates the necessity of constructing expensive laterals on both sides of the stream. The laterals, if used, would originate at Heart Butte Dam or from a diversion dam. The construction of the laterals would be expensive as the terrain which they would traverse is exceptionally rough. The laterals, if installed, would make delivery to the high point of the irrigable land on each farm unit. Pumps and stub laterals are to be used in making delivery to the high point of the farm unit and can accomplish this objective at a considerably lower cost.

Federal delivery to the high point within farm units, through the use of pumps, is not new on Bureau of Reclamation projects. This procedure has been followed in some cases on the Columbia Basin project and is particularly true on the Pasco pumping unit. Federally operated pumps are used to lift water from laterals to isolated high areas within the individual farm unit. In some instances the pumps serve a relatively small acreage. The overall cost for this type of service on the western Heart project is not prohibitive as it amounts to $157 per acre.

In many instances farmers residing on the western Heart project have leveled their land and made preparation for irrigation. This has resulted in heavy cash expenditures on their part which they cannot afford to lose. An obligation has been created on the part of the Government to provide these people irrigation facilities.

The rural electric cooperative that supplies the electric energy for the pumps has now repoled the lines for 3-phase service and would require restitutions if the poles were not used as intended.

Heart Butte Dam has a reservoir capacity of 426,000 acre-feet of which 350,000 acre-feet are reserved for the control of floods. In 1943 the city of Mandan suffered a disastrous flood when the Heart River at Mandan reached an overflow of 21,700 cubic feet per second. In 1950 a flow of 40,000 cubic feet per second was recorded at Mandan and it is estimated that the flood of that year would have caused $3 million in damages or approximately the cost of the dam. The dam, on a flood-control basis, has been credited with paying for its cost in its initial year. The levees, constructed in the vicinity of Mandan, and the Heart Butte Dam have been credited with preventing damages totaling $6,800,000 during the years of 1950, 1951, and 1952. According to the Corps of Engineers, the annual flood benefits, based on 1953 prices, and credit to the Heart Butte Dam is $251,700. The city of Mandan has been subjected to 24 severe floods in the past 68 years.

I appreciated the opportunity of appearing before your committee hearing on May 10 relative to the Garrison Pool level elevation and appropriations for the Garrison diversion unit. I also enjoyed and appreciated your remarks relative to the priority water-right allocation method that we have in our State.

With the kindest regards.

Sincerely yours,

MILO W. HOISVEEN,
Secretary and Chief Engineer, State Engineer.

GEORGIA POWER CO.

Chairman HAYDEN. Mr. Harllee Branch, Jr., president of the Georgia Power Co., has presented a statement concerning the position of the Georgia Power Co. with regard to the disposal of the power of the Clark Hill project. Mr. Branch's statement will be included in the record.

(The statement referred to follows:)

FEDERAL RESERVOIR POWER IN GEORGIA—STATEMENT OF HARLLEE BRANCH, JR., PRESIDENT OF THE GEORGIA POWER CO.

Mr. Chairman, and gentlemen of the committee, I appreciate the opportunity to file with this committee a statement briefly summarizing the efforts which the Georgia Power Co. has made, and is making, to reach an equitable agreement with the Federal Government for the distribution of reservoir power in the service area of the company.

We are informed that certain witnesses whose real interest, it seems, is not to achieve economy and efficiency in the distribution of governmental-produced electric power, but to create a federally financed electric empire in the Southeast, have lately endeavored to justify the construction of duplicate transmission lines in Georgia, on the basis that the Georgia Power Co. has been unwilling to cooperate in delivering power from the Clark Hill project to preference customers in its service area. They have said that the company is not willing to deliver this power to the preference customers except on the basis of a financial profit to itself. Their testimony to this effect is incorrect.

Actually, long before the Clark Hill Dam was completed, the Georgia Power Co. began negotiations with the Department of the Interior, looking toward the use of the company's facilities to distribute power from the Clark Hill project on a nonprofit basis and in a manner which would assure delivery of the power to the largest number of preference customers, over the widest area, and at the lowest possible cost under any method yet devised. The company's proposal, and its persistent efforts to resolve the Clark Hill controversy on a basis conforming to congressional statutes and direction, was fully explained to the Senate Committee on Interior Department Appropriations, in the years 1951, 1952, and 1953. It was also fully explained in those years to the House Committee on Interior Department Appropriations.

The Senate committee, through its chairman, in 1952 concluded that the company's proposal fully conformed with the requirements of section 5 of the Flood Control Act of 1944. This was indicated by the following colloquy between the chairman of the committee and Senator George on the floor of the Senate on June 25, 1952:

"Mr. GEORGE. Mr. President, I desire to ask a question of the Senator in charge of the bill. On page 2 beginning in line 15, we find the following language:

" '(1) a contract with the affected power companies in the area of substantially the type which has heretofore been executed in other power areas—'

"and so forth. Is that provision intended to exclude a type of contract which will comply with all requirements, such as that which has been discussed by the president of the Georgia Power Co.?

"Mr. HAYDEN. No, not at all, because I am certain it would comply with the law, as it is of the type of bus-bar contract heretofore made.

"Mr. GEORGE. It is not intended to exclude a particular contract?

"Mr. HAYDEN. Not at all."

Thereafter, extensive negotiations continued between the Interior Department and the company. On May 20, 1954, the Interior Department submitted to the company a basic definitive contract, as provided for in Interior's tricontract proposal, modifying the company's proposal in certain respects deemed by Interior additionally advantageous to the Government and the preference customers. A copy of this proposal is attached to this statement for the information of the committee. Interior's proposal was promptly accepted by the Georgia Power Co. and signed by me as its president on May 27, 1954.

Under this contract, the Clark Hill power would be distributed to preference customers over a wider area and at lower cost than under any plan yet suggested. The arrangement would not require any expenditure of Government funds for

firming or supplemental power, transmission lines, or other facilities. It would make available to preference customers all of the commercially usable capacity and energy, less transmission line losses, produced at the project and assigned to Georgia. It would increase the usable power by integrating Clark Hill with the company's extensive electric system which includes steam as well as hydroelectric generating plants. It meets every requirement of section 5 of the Flood Control Act of 1944.

The only reason the contract did not go into effect at that time was that certain parties, including spokesmen for the National Rural Electric Cooperative Association, set about to distort the true intentions of the agreement and to stir up a controversy between the rural electric cooperatives and our company. It is they, and not the company, who have caused the delay in this matter. The record of previous hearings by this committee and the recent testimony will clearly show that this is true.

The Interior tricontract proposal, like the company's original proposal, provides for the distribution of Clark Hill power to the preference customers in Georgia without financial profit to the company, and on a basis more economical and efficient than any other plan yet proposed. As the chairman and certain members of the Senate Committee on Appropriations declared during the hearings in 1951, the company proposal would meet all requirements of law and make Government transmission lines unnecessary. They said:

"Senator CORDON. Mr. Branch, I will have to back up. Under that language, your contract would answer the requirements of the law, in my opinion.

"Senator ELLENDER. What was that?

"Senator CORDON. I say his proposal would answer the requirements of the law.

* * * * * * *

"Senator ELLENDER. I believe if other companies were to offer such a splendid proposal as you are suggesting, that there would be virtually no use in building any of the power lines in that area.

* * * * * * *

"Senator HAYDEN. If other power companies in that area assumed the same attitude you have, and were willing to see that the power generated at Government dams was made available to preference customers of the Government, there would be no necessity for operating or maintaining any transmission lines."

Now, in order that the record may speak the truth, and in order that our company may not be blamed for delays which are really the result of actions and propaganda of other parties, I would like to present a factual statement of what we have done in our unceasing efforts to settle this matter. Here are the facts:

In 1948 the company suggested to the Department of the Interior that a contract be negotiated for distribution of the portion of the Clark Hill power to be assigned to Georgia. Following several informal discussions, the Georgia Power Co., on March 24, 1950, submitted to the Southeastern Power Administration, on behalf of the 4 companies comprising the Southern Company System, "a broad plan for the distribution and integration of all of the power and all of the capacity that might be available from the Clark Hill, Buford, and Jim Woodruff power projects, or any subsequent Government reservoir power projects in the area of the Georgia Power Co., or in that of any of its 3 sister companies." (This plan was printed in the hearings before the House Subcommittee on Interior Department Appropriations for the fiscal year 1952, pp. 1494–1495.)

Representatives of the Department of the Interior and the Georgia Power Co. held many negotiating conferences during 1950 and 1951. At the request of the Department the discussions were limited to the distribution of Clark Hill power in the service area of the company. The negotiations resulted in a definitive draft of contract for Clark Hill power dated September 11, 1951. (An outline of the definitive draft of contract was printed in the hearings before the House Subcommittee on Interior Department Appropriations for the fiscal year 1953, pp. 1287–1289; and the contract was printed in full in the hearings before the Senate Subcommittee on Interior Appropriations for the fiscal year 1953, pp. 1174–1182.)

On January 2, 1953, a few days before he left office, the then Secretary of the Interior rejected the contract which had been negotiated by representatives of the Department and the company.

In August 1953, the Assistant Secretary of the Interior for Water and Power invited representatives of the REA cooperatives in Georgia and of the Georgia Power Co. to meet in Washington with officials of the Department "to consider the provisions that should be put in a permanent contract for the disposition of hydroelectric power from the Clark Hill project." The meeting, on September 1, 1953,

was attended by members of the Georgia Electric Membership Corp., their legal counsel, and an engineering adviser, and by representatives of the Georgia Power Co. Representatives of the GEMC submitted, first, a proposal under which GEMC would purchase the Clark Hill power assigned to Georgia and the Georgia Power Co. would wheel it for GEMC; and, second, a proposal under which GEMC would purchase the power and resell it to the Georgia Power Co. under certain conditions as to rates and distribution.

The Department of the Interior gave further consideration to the definitive draft of contract dated September 11, 1951, to the proposals of GEMC, and to the suggestions of the REA Administrator in an effort to draft a contract satisfactory to all parties.

At the conference in February 1954, which was attended by all interested parties including an official from the White House, the Assistant Secretary presented an outline of a Clark Hill tri-contract proposal and a draft for study of each of three contracts under the proposal, which had been prepared by the Department. Counsel for the GEMC requested and was granted time to study the proposal and contracts.

During April and early May 1954, the contracts under the tri-contract proposal were discussed, paragraph by paragraph, by the various interested parties and an effort made to obtain an agreement.

In May 1954, the assistant secretary submitted to the company, for approval and signature, the basic contract under the tri-contract proposal as revised following the conferences attended by representatives of GEMC and the company. The contract was signed by the president of the Georgia Power Co. and brought to Washington for the signature of the Secretary of the Interior. Action on the contract, however, has been postponed from time to time and it has not been signed. A copy of the contract as prepared by the Department and executed by the Georgia Power Co. is, as previously stated, attached to this statement.

A table giving a comparison of certain items in the definitive draft of contract dated September 11, 1951, with similar items in the basic contract of the tri-contract arrangement is also attached. This comparison shows the many concessions made by the company which would have the effect of increasing the amount of power available to the preference customers and of increasing the company's payments to the Government.

Within recent weeks there has been submitted to the company a revised proposal for the distribution of Clark Hill power, which we understand to be the result of extensive discussions between the Georgia cooperatives and certain representatives of the Federal Government. This proposal is the subject of conversations now going on between the Interior Department and the company.

We will continue our efforts to resolve this proposal at the earliest possible date and on a basis which complies with the law and is fair to all parties.

There is no necessity or justification for the appropriation of Federal funds to coerce this company. The record amply demonstrates that this company has not delayed its efforts to resolve the issue, and that it would have been settled long ago except for the intransigence of other parties who, seemingly, have preferred controversy to efficiency and economy in the distribution of the federally generated electric power.

CONTRACT EXECUTED BY THE UNITED STATES OF AMERICA, DEPARTMENT OF THE INTERIOR AND GEORGIA POWER COMPANY

This Contract, executed this —— day of ———, 1954, by and between the United States of America, Department of the Interior (hereinafter called the "Government"), and Georgia Power Company, a corporation organized and existing under the laws of the State of Georgia (hereinafter called the "Company"),

WITNESSETH:

That whereas, the Secretary of the Interior is authorized by Section 5 of the Flood Control Act of 1944 (16 U. S. C., 1946 ed., Sec. 825s) to transmit and dispose of electric power generated at reservoir projects under the control of the Department of the Army not required in the operation of such projects and the Secretary of the Interior has, by Departmental Order No. 2558, dated March 21, 1950 (15 F. R. 1901), delegated to the Administrator of the Southeastern Power Administration his authority under said Section 5 with respect to projects then or thereafter constructed in the State of Georgia; and

Whereas the company is a privately owned public utility engaged in the business of selling electric power to the general public and owns and operates generating plants and transmission and distribution systems in the State of Georgia; and

Whereas, the Department of the Army is in process of completing in and adjacent to the territory served by the company a certain Federal multiple-purpose reservoir project for flood control, stream regulation, navigation and power, located on the Savannah River approximately 18 miles northwest of Augusta, Georgia, known as the "Clark Hill Reservoir Project" (referred to herein as the "Project"); and

Whereas, under the provisions of Section 5 of the Flood Control Act of 1944 the Secretary is directed to take into account several factors in the marketing of the power from the Project, as follows:

"Electric power and energy generated at reservoir projects under the control of the War Department and in the opinion of the Secretary of War not required in the operation of such projects shall be delivered to the Secretary of the Interior, who shall transmit and dispose of such power and energy in such manner as to encourage the most widespread use thereof at the lowest possible rates to consumers consistent with sound business principles, the rate schedules to become effective upon confirmation and approval by the Federal Power Commission. Rate schedules shall be drawn having regard to the recovery (upon the basis of the application of such rate schedules to the capacity of the electric facilities of the projects) of the cost of producing and transmitting such electric energy, including the amortization of the capital investment allocated to power over a reasonable period of years. Preference in the sale of such power and energy shall be given to public bodies and cooperatives. The Secretary of the Interior is authorized, from funds to be appropriated by the Congress, to construct or acquire, by purchase or other agreement, only such transmission lines and related facilities as may be necessary in order to make the power and energy generated at said projects available in wholesale quantities for sale on fair and reasonable terms and conditions to facilities owned by the Federal Government, public bodies, cooperatives, and privately owned companies. All moneys received from such sales shall be deposited in the Treasury of the United States as miscellaneous receipts * * *."

Whereas there presently exist in the service area of the Company in the State of Georgia 44 municipalities (hereinafter individually called a "Municipality") owning electric distribution systems and 37 electric membership corporations (hereinafter individually called a "Cooperative") which fall within the class of public bodies and cooperatives (hereinafter called "Preference Customers") within the meaning of Section 5 of the Flood Control Act of 1944; and

Whereas the Government is not possessed of any transmission facilities within the State of Georgia by or through which it may transmit power to Preference Customers, including those hereinabove referred to, and the construction of such transmission facilities would be dependent upon appropriations by the Congress which have heretofore been denied; and

Whereas none of the said Preference Customers own or control electric transmission facilities interconnected with the Project; and

Whereas the said Project is now producing substantial amounts of electric power which the Government desires to make available to Preference Customers within the State of Georgia; and

Whereas the Company is presently serving Preference Customers within its service area and has transmission, substation, and transformer facilities adequate to transmit electric power from the Project to the said Preference Customers; and

Whereas there is no other medium except the Company within the State of Georgia having available electric facilities adequate to transmit said power from the Project to the preference consumers thereof in the State of Georgia; and

Whereas it is required of the Secretary and is in the interest of the Government that the entire power output of the said Project be sold and the proceeds therefrom applied to the liquidation of the cost of the Project; and

Whereas the plan hereinafter set forth results in an inmmediate disposition of the power produced at said Project and available for Georgia and results in the most widespread use thereof by Preference Customers in said State; and

Whereas the Government is under directive by the Flood Control Act of 1944 that it shall construct "only such transmission lines and related facilities as may be necessary in order to make the power and energy generated at said projects available in wholesale quantities"; and

Whereas peaking capacity and secondary or seasonal energy will be produced at said Project which cannot be marketed except through or to agencies having other and independent generating facilities; and

Whereas it is recognized by the parties hereto that substantial benefits can result from the integration of said Project with an existing interconnected transmission and distribution system such as that of the Company, these benefits including but not being limited to the following:

(a) A material increase in the amount of firm power which can be made available for Preference Customers from said Project as a result of thus supplementing Project's generation with generation from such existing facilities.

(b) A potential market for surplus secondary and seasonal energy that may be generated at this Project is afforded by the Company's interconnected transmission and distribution system.

(c) A potential market for surplus peaking capacity is afforded by the Company's system; and

Whereas the Company can and is willing, through integration to so utilize its firming capabilities and markets for surplus peaking capacity and surplus energy; and

Whereas the parties hereto have agreed upon a plan which is embodied in this contract, whereby each and all of the aforesaid provisions may be fully complied with so that (a) public bodies and cooperatives will obtain all benefits of such available power attributable to the Project at whatever price and other advantages as may be provided under Section 5 of the Federal Flood Control Act of 1944; (b) such public bodies and cooperatives may obtain any additional power required by them from the Company; (c) any power not used by said Preference Customers will be used to serve other customers of the Company, thereby providing for the sale of the entire available output of the Project assigned to Georgia; and (d) there will be a widespread use of such available power by public bodies, cooperatives, and others at the lowest possible rates consistent with sound business principles; and

Whereas in the event the power from the Project is delivered to the Company, the Company has agreed to make the power as firmed under this contract available to such Preference Customers in its service area as shall be designated by the Government and at such rates as shall be designated by the Government and as hereinafter set forth, and has further agreed to continue to maintain all facilities necessary to permit the receipt by the Preference Customers of such amounts of said power as they may contract to receive; and

Whereas the Government agrees to advise the Company in writing of its designation of any Preference Customer who is to receive benefits under this contract, together with the amount of Project power assigned to such customer, and the Company in turn agrees that it will enter into individual contracts with such designated Preference Customers under which they will be entitled to the benefits provided for them by this contract; and

Whereas it has been determined that such plan provides the widest possible distribution that is presently feasible of the output of the Project to all Preference Customers entitled to preference under the law, at rates fixed by the Government;

Now, therefore, in consideration of the mutual covenants hereinafter set forth, the Government and the Company agree as follows:

SCOPE OF CONTRACT

1. This contract shall apply to electric power delivered to the Government from the Project, and in turn delivered by it to the Company under this contract, it being the intent of the parties to provide herein a plan to make effective the various purposes of the Congress, as expressed in Section 5 of the Flood Control Act of 1944.

POWER TO BE FURNISHED

2. The Government will deliver to and the Company will receive, at the points of delivery hereinafter described, fifty percent (50%) of all electric capacity and energy produced by the Project, except as hereinafter provided.

GOVERNMENT RIGHT OF WITHDRAWAL OF POWER

3. The Government reserves the right to withdraw firm Project power covered under this contract for delivery to Preference Customers in Company's service area at a load factor of approximately thirty-five percent (35%) up to 10,000 kilowatts in any one calendar year, plus, at its option, a proportionate amount of peaking capacity after six (6) months' notice to the Company in writing, whenever either the Government or the Preference Customers shall have constructed or otherwise made available transmission facilities adequate to receive such power without the utilization of the facilities of the Company. Any additional amounts

up to and including the whole amount of the capacity and energy herein to be delivered to the Company and assigned to the Preference Customers may be withdrawn on three (3) years' written notice to the Company, it being estimated that a period of approximately three years is required by either of the parties hereto to adjust their construction of additional or alternative facilities.

In the event the Government withdraws capacity and energy in accordance with the provisions of the preceding paragraph, the capacity and energy to be paid for by the Company and delivered by the Company to designated Preference Customers shall be proportionately reduced.

FIRM POWER

4. It is recognized that the streamflow of the Savannah River is not adequate to maintain the plant in constant operation at its maximum generating capacity. The proportion of said power allocated to the State of Georgia is represented by generating capacity of 120,000 kilowatts, but the water supply limitation in an adverse water year would make such 120,000 kilowatts available only about twenty-three percent (23%) of the time, constituting a limiting plant load factor of only about twenty-three percent (23%), and if the plant is operated at a load factor of thirty-five percent (35%), the capacity available to the Georgia proportion of the plant will be reduced to 80,000 kilowatts in an adverse water year. Firm capacity available under this contract that is to be delivered to the Company is equal to 80,000 kilowatts at approximately thirty-five percent (35%) load factor. The Company agrees to increase such energy by supplying firming energy from the Company's interconnected system, so that there will be available at the Project 80,000 kilowatts at fifty percent (50%) load factor. Such power is hereinafter referred to as Firm Power. It is agreed that such Firm Power, less energy losses in transmission and transformation, and less that part withdrawn as provided in Article 3, shall be the amount available for Preference Customers.

RATES AND CHARGES

5. (a) *Firm Power.* The Government shall receive its compensation from the Company at the rate of $0.75 per kilowatt per month for 80,000 kilowatts, or such portion thereof as is made available to the Company in accordance with the provisions of this contract, and at the rate of 3.4 mills per kilowatt-hour for all energy received from the Project up to a maximum equivalent to fifty percent (50%) load factor during any month; provided, however, that such energy shall be delivered during the peak-period hours, as defined in Article 10 hereof. If the delivery of one-half of the firm output of the Project in accordance with Article 10 hereof, results in a disproportionate and unequal division of the total Project capacity and energy over a reasonable period of time as between customers of the Government in Georgia and South Carolina, then an appropriate adjustment in the schedule of power deliveries shall be made by mutual agreement between the parties hereto.

(b) *Interim Power.* In event the Government elects to commit and deliver more than fifty percent (50%) of the firm electric capacity and energy available at thirty-five percent (35%) load factor from the Project to the Company on an interim basis, the Company agrees to accept and the Government will be compensated for such increased deliveries by increasing proportionately the quantities of capacity and energy specified under paragraphs (a) and (d) of this Article 5; provided, however, that such interim capacity and energy may be withdrawn at thirty-five percent (35%) load factor by the Government in amounts not exceeding 10,000 kilowatts in any one calendar year on six months' written notice, and in greater amounts on three years' written notice to the Company in advance of the date upon which such withdrawal is to become effective.

(c) *Peaking Capacity.* The Government agrees to deliver additional capacity for use by the Company as such capacity becomes available at the Project and the Company agrees to accept and pay for such capacity at the rate of $0.75 per kilowatt per month; provided; however, that such capacity to be accepted and paid for by the Company shall not exceed fifty percent (50%) of the capacity made available to it under paragraphs (a) and (b) of this Article 5. The Government may supply further capacity to the extent such capacity is available at the Project from time to time at $0.03 per kilowatt per day; provided, however, that the purchase of such capacity shall be at the option of the Company.

(d) *Secondary Energy.* The parties hereto have recognized that energy delivered during peak-period hours is of greater value than energy delivered at other times. On this basis the Government agrees to deliver when available and the Company

agrees to accept and pay for energy received from the Project during the peak-period hours as defined in Article 10, hereof, in excess of that provided for under paragraphs (a) and (b) of this Article 5 at the rate of 3.4 mills per kilowatt-hour for the first four (4) million kilowatt-hours per week. The delivery and receipt of secondary energy in an amount of more than (4) million kilowatt-hours per week as provided for in this paragraph shall be by mutual agreement and at a rate to be agreed upon at the time such energy is determined to be available.

(e) *Use of Generators as Condensers.* The Company agrees to return to the Government an amount of energy equivalent to that used in operating the generators as condensers as provided in Article 15 hereof. The amount of such energy shall be determined by mutual agreement from operating tests.

DISPOSITION OF FIRM POWER

6. (a) The Company agrees to deliver within its service area to such Preference Customers as shall have entered into contracts with the Government and the Company an amount of power equal to the Firm Power as defined in Article 4 hereof, less an allowance for transmission and transformation losses. After deducting for energy losses and after offsetting losses in capacity by the diversity between the thirty (30) minute integrated demands of the Preference Customers served under this contract, the Firm Power available for delivery to Preference Customers is agreed to be equal to a total of 80,000 kilowatts of undiversified thirty (30) minute integrated demand of the customers at a load factor of forty-five percent (45%), less the Firm Power withdrawn by the Government as provided by Article 3 hereof.

(b) Preference Customers shall be as defined in Section 5 of the Flood Control Act of 1944. To be entitled to receive electric power at any delivery point, under this contract, a Preference Customer, other than a Municipality or a Cooperative, must have a demand of not less than 500 kilowatts at that delivery point, while a Municipality or Cooperative must have a demand at such delivery point of not less than 100 kilowatts; except that where in order to provide a delivery point for a Municipality or Cooperative the construction of transmission lines of any substantial length is required, the Company shall not be obligated to construct such such lines at its expense where the demand of such customers is less than 200 kilowatts.

(c) The Government shall notify the Company in writing of its designation of any Preference Customer under this contract and of the maximum amount of power, in kilowatts of capacity and the associated energy at a load factor of 45 percent, assigned to such customer. Until receipt of such written notice, no customer shall be treated as a Preference Customer under this contract. The arithmetical sum of all such assignments to Preference Customers by the Government shall not exceed the amount of capacity and energy available for sale to Preference Customers as provided in paragraph (a) of this Article 6.

(d) All contracts with Preference Customers entered into by the Government shall run concurrently with, but shall not exceed, the duration of this contract. All such Preference Customers with which the Government has executed contracts shall have agreed with the Government to abide by the standard terms and conditions of service of the said Company, but in order to take into account the various individual circumstances with reference to the service of the particular customer, shall enter into separate contracts with the Company with reference to such terms and conditions. (Copies of the standard forms of contract presently applicable to municipalities and rural electric cooperatives served at wholesale by the Company are attached hereto for purposes of information only. The said standard contract forms shall not be construed as being either a predicate or part of this contract.)

(e) For the Firm Power made available to a Preference Customer under this contract, such Preference Customer shall compensate the Company therefor at a rate of $0.75 per kilowatt per month, plus 4.0 mills per kilowatt-hour for all such capacity and energy delivered to the Preference Customer. Such rates shall be set forth in the contract between the Government and said Preference Customer and in the special contract between the Company and said Preference Customer.

(f) In the event any Preference Customer in any month shall require power in excess of the amount of power designated for that Customer by the Government, the Company agrees to sell and deliver to such Customer all capacity and energy required by the Customer over and above that furnished under Article 6 (a) above at the price per kilowatt-hour which the Company's regular applicable rate, applied to the Customer's capacity and energy use during the month, would have earned under the terms and conditions of the contracts described in 6 (d) above.

DEFICIENCY OF PROJECT ENERGY AS RESULT OF SCHEDULING BY COMPANY

7. (a) When, as a result of scheduling by the Company as provided under Article 9 hereof, Project generation is insufficient to supply capacity and energy withdrawn by the Government in accordance with the provisions of Article 3 hereof, or the Company's pro rata share of energy required in the operation of the Project, such deficiency shall be supplied from Company sources.

(b) Energy supplied to the Government in accordance with the provisions of Article 7 (a) above shall be deducted from energy delivered to the Company by the Government and the remainder shall be used in determining the monthly billing to the Company hereunder. In event there is a net delivery of energy to the Government by the Company during any month, such energy shall be returned in kind (that is, peak period, valley period, or weekend energy) during the next succeeding month or months.

DELIVERY OF FIRMING ENERGY TO GOVERNMENT

8. Subject to the authorization and availability of appropriations for the purchase of supplemental capacity and energy by the Government, the Company agrees to supply to the Government from Company sources energy to supplement firm capacity not to exceed 80,000 kilowatts and energy withdrawn by the Government under the provisions of Article 3 hereof, so as to increase the load factor of the reserved or withdrawn firm capacity from 35 percent to 50 percent. The Company further agrees to supply energy when, as, and if available from its generating plants or purchase sources to supplement Project generation assigned for ultimate use outside the Company's service area. Energy supplied by the Company for any purpose described in this Article 8 shall be paid for at the incremental cost to the Company of generating or purchasing such energy plus 15 percent plus 1 mill per kilowatt-hour.

PROVISIONS FOR SERVICE

9. (a) Subject to such regulations as to the maximum and minimum release of water from the Project reservoir for flood control and stream regulation as may be established from time to time by the Corps of Engineers, Department of the Army, and subject to the provisions of Articles 15 and 18 hereof, the Government will operate the Project, under operating rules to be mutually agreed upon from time to time, in such manner as to generate that portion of the Project output assigned to the Company's service area (including a pro rata part of the energy required in the operation of the Project) at such times and in such quantities as may be scheduled by the Company and which are within the capability of the Project to produce; and will deliver such energy (less the aforesaid pro rata part of the energy required in the operation of the Project, and less any energy which may be delivered by the Government directly to a Preference Customer located within the Company's service area) to the Company at the voltage of the Company's high tension lines where connected in the Project's switchyard.

(b) The Company will schedule its receipt of capacity and energy and the Project will be so operated as to make the most effective use of the available equipment and reservoir storage capacity, all in accord with Section 9 (a) of this contract, such use to be governed by the following considerations:

(1) Obtaining maximum generation at the Project during periods when natural stream flows are low.

(2) Obtaining maximum energy generation at the Project during peak periods.

(3) Obtaining maximum total generation at the Project.

(4) Providing maximum benefits to downstream plants.

(c) To the extent of the generating capacity which the Government determines to be available to the Company, the Company shall schedule the generation of energy to utilize all of the water made available to it which the Corps of Engineers requires to be released from the reservoir. In the event water is wasted at the Project due to departure by the Company from current operating rule curves and operating schedules, which departure is not attributable to an uncontrollable force as defined in Article 18 hereof, to action by some other scheduling or dispatching agency, a regulation established by the Corps of Engineers, Department of the Army, referred to above, or to action of the Government permitted by Article 15 hereof the Company shall pay the Government for the electrical energy equivalent to the water so wasted at a rate mutually determined to be appropriate.

(d) Electric power supplied hereunder by either party hereto will be three-phase alternating current at a nominal frequency of sixty cycles per second.

PEAK PERIOD

10. (a) Under this contract, the peak period shall be the one hundred (100) hours of each seven-day week designated by the Company. All other time shall be the off-peak period. Energy delivered during any peak period shall be known as peak energy. Energy delivered during any off-peak period shall be known as off-peak energy.

(b) The Company hereby designates the hours between 7:00 a. m. and 12:00 p. m., Eastern Standard Time, during the five days, Monday through Friday inclusive, and from 7:00 a. m. to 10:00 p. m., Eastern Standard Time, on Saturday, as being the peak period for initial operation under this contract. The Company shall have the right to change the peak period hours from time to time at intervals of not less than four (4) months by giving the Government ten (10) days' prior written notice of such change.

MEASUREMENT OF ELECTRIC POWER

11. The electric power delivered hereunder to the Company and to the Government will be measured by metering equipment to be furnished, installed, and maintained by the Government. The Company may, if it so desires, install check meters. All meters shall be sealed and seals shall be broken only upon occasions when the meters are to be inspected, tested, or adjusted and representatives of the parties hereto shall be afforded reasonable opportunity to be present on such occasions. The Government meters shall be tested at least once each year and also at reasonable intervals upon request by the Company. Any metering equipment found to be defective or inaccurate shall be repaired and readjusted or replaced. If any of the meter tests provided for in this Article 11 disclose that the error of any meter or meters exceeds two percent (2%), correction, based upon the inaccuracy found, shall be made of the records of electric service since the beginning of the billing month immediately preceding the billing month during which the tests were made, except that no correction will be made for a longer period than such inaccuracy may be determined to have existed. Should a meter or meters fail to register, the electric power delivered hereunder during such period of failure to register shall, for billing purposes, be estimated from the best information obtainable.

BILLING AND PAYMENT

12. (a) Bills for service each month under the terms of this contract shall be mailed by the Government to the Company on or before the tenth day of the succeeding month and shall be payable on or before the last day of the month in which the bill is presented, herein referred to as the "payment date." There shall be added, as liquidated damages, interest of one-half of one percent (½%) to any undisputed amount remaining unpaid on the first day of the month next succeeding the "payment date" and an additional one-half of one percent (½%) shall be added on the first day of each succeeding month on the remaining past due and unpaid balance until the account is paid in full. Should the Company fail to pay any bill when due in accordance with the provisions of this paragraph and paragraph (c) of this Article 12, the Government shall have the right to discontinue service upon 15 days' written notice and to refuse to resume service as long as part of any overdue amount remains unpaid. Such discontinuance shall not relieve the Company of liability for charges during the period service is discontinued.

(b) Any correction in billing resulting from a correction of metering records as provided in Article 11 hereof, shall be made in the bill for the month in which the meter test resulting in the correction was made.

(c) In the event of a dispute concerning the correctness of any bill, or any part thereof, rendered pursuant to paragraph (a) of this Article 12, the Company shall pay the undisputed portion of such bill on or before the "payment date" and shall inform the Government in writing of the nature of the claim of error. If the representatives of the Company and the representatives of the Government cannot agree with respect to such disputed bill within sixty days after the bill was first received by the Company, the Company shall either pay the amount in dispute under protest or present to the Government a written statement of the proper amount which the Company alleges it owes, with a request that the Secretary of the Interior or his designee make a finding as to the proper amount of such disputed bill. The Company shall make payment in accordance with the finding of the Secretary of the Interior or his designee, within fifteen days after receipt of such finding. However, in making such payment the Company shall not waive any right it may have to proceed to a judicial determination of the correctness of the amount.

FACILITIES TO BE PROVIDED BY THE COMPANY

13. (a) The Company shall provide a high voltage transmission line or lines of adequate capacity to receive that portion of the output of the Project made available to the Company, from a suitable point on the Company's existing transmission system to connect with the high voltage bus in the switchyard of the Project. The Government will, without charge, grant to the Company all necessary easements across property of the Government and all necessary permission to enable the agents of the Company to carry out this contract and construct and maintain its lines and circuits in and at all places required by the Company and owned, leased, or controlled by the Government. Protective equipment for this line or lines, other than that planned for installation by the Corps of Engineers, shall be provided by and installed by or at the expense of the Company. Communication equipment other than public communication system telephones (which will be provided at the expense of the Government) shall be supplied by the Company and installed by or at the expense of the Company. Space will be provided for facilities necessary to be installed by the Company in the switchyard or powerplant at the Project. Load control equipment to permit the use of the Project's powerplant in the regulation of the Company's system and which would not otherwise be required shall be supplied and installed by or at the expense of the Company. Such load control equipment shall be as specified by the Company and approved by the Government.

(b) Any part of the equipment listed in paragraph (a) which is installed by or at the expense of the Company shall be maintained by or at the expense of the Company and shall remain the property of the Company. Reasonable time for removal of such equipment by the Company will be allowed at the termination of the contract. Any costs arising out of such removal shall be paid by the Company. At the option of the Government such equipment may be purchased by the Government at a reasonable price to be mutually agreed upon at the time. The Government also gives the Company the right by its duly authorized agents and employees to enter the premises of the Government at all reasonable times, for the purpose of keeping in repair or removing its own wires, reading meters, and performing any other work incident to this contract.

COORDINATION OF SYSTEM CONSTRUCTION, OPERATION AND MAINTENANCE

14. The Government and the Company shall coordinate the construction, operation, and maintenance of their respective power systems in a manner which will not interfere with any service supplied from the power system of either party.

CONSTRUCTION, OPERATION, AND MAINTENANCE OF GOVERNMENT'S FACILITIES

15. The Government will not be required to operate any generating unit at a load which in the judgment of the Corps of Engineers will result in excessive deterioriation of facilities. The Company may schedule the operation of the generators at no load as condensers under the arrangement provided in Article 5 (e) hereof. The Government shall maintain the powerplant in good operating condition at all times unless prevented by uncontrollable forces. The Government may remove facilities from service for maintenance, repairs, replacements, installation of equipment, investigations, and inspections. Except in case of emergency, the Government will give the Company reasonable advance notice of such removal from service and, insofar as possible, will so schedule removals as not to interfere with service to the Company. The work necessary to restore the facilities to serviceable condition will be performed with diligence.

LIABILITY

16. Unless such claim shall arise because of their negligence, neither the Company nor its officers, agents, or employees shall be liable for any claim arising from the construction, operation, or maintenance of the facilities of the Government under this contract. Unless such claim shall arise because of their negligence, neither the Government nor its officers or employees shall be liable for any claim arising from the construction, operation, or maintenance of the facilities of the Company under this contract.

TRANSFER OF INTEREST IN CONTRACT

17. No voluntary transfer of this contract or of the rights of the Company hereunder shall be made without the written approval of the Government; provided, that any successor to or assignee of the rights of the Company, whether

by voluntary transfer, judicial sale, foreclosure sale, or otherwise, shall be subject to all the provisions and conditions of this contract to the same extent as though such successor or assignee were the original contractor hereunder; and provided, further, that the execution of a mortgage or trust deed, or judicial or foreclosure sale made thereunder, shall not be deemed voluntary transfers within the meaning of this Article 17.

UNCONTROLLABLE FORCES

18. Neither party shall be considered to be in default in respect to any obligation under this contract if prevented from fulfilling such obligation by reason of uncontrollable forces. For the purposes of this contract, the term "uncontrollable forces" means any cause beyond the control of the party affected, including, but not limited to, failure of facilities, flood, backwater caused by flood, drought, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, and restraint by court or public authority, which by exercise of due diligence and foresight such party could not reasonably have been expected to avoid. Either party rendered unable to fulfill any obligation by reason of uncontrollable forces shall exercise due diligence to remove such inability with all reasonable dispatch.

WAIVERS

19. Any waiver at any time by either party hereto of its rights with respect to a default or any other matter arising in connection with this contract shall not be deemed to be a waiver with respect to any subsequent default or matter.

NOTICES

20. Communications under this contract shall be addressed by the Company to the Administrator, Southeastern Power Administration, Elberton, Georgia, and by the Government to the Secretary, Georgia Power Company, Electric Building, Atlanta 3, Georgia. Either party may, at any time, by written notice change the official, or the address of the official, to whom it wishes communications addressed.

OFFICIALS NOT TO BENEFIT

21. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, but this restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefit.

APPROVAL OF RATES BY FEDERAL POWER COMMISSION

22. It is understood that all charges for capacity and energy delivered by the Government to the Company under this contract are subject to approval and confirmation by the Federal Power Commission, and to periodic reviews by that agency at five-year (5) intervals. If, as a result of said periodic reviews the Government promulgates a rate schedule superseding the rate schedule then in effect under this contract, the Government will promptly notify the Company thereof. Said superseding rate schedule, as of its effective date, shall become effective as to this contract unless the Company, by notice in writing given to the Government within sixty (60) days after notice to it by the Government of promulgation of said superseding rate schedule, shall elect to terminate this contract effective as of such date as the Company may specify not more than three (3) years subsequent to the date of such notice by the Company. In the event of notice of such termination, said superseding rate schedule shall not be effective during the period of the remaining unexpired term of this contract. In the event the Government shall at any time reduce the rates to the Company for energy or capacity designated for Preference Customers under the terms of this contract, a similar proportional reduction will be effected by the Company to the Preference Customers for such energy or capacity.

EFFECTIVE DATE AND TERM OF CONTRACT

23. This contract shall become effective upon execution by the parties hereto, and shall remain in effect for a term of fifteen (15) years unless sooner cancelled by either party upon written notice given not less than three (3) years in advance. The initial delivery of power hereunder is to take place coincidentally with the execution of this contract.

CONTINGENT UPON APPROPRIATIONS

24. The liability of the Government under this contract is made contingent upon the appropriation by the Congress of the funds required by the Government to perform its obligations under the contract. If, during the period covered by the contract, the necessary funds are not appropriated, the Company hereby releases the Government from all liability for failure to perform its obligations under the contract.

LEGAL REMEDIES

25. No provision of this contract shall be so construed as to abridge, limit, or deprive either party of any means of enforcing any remedy either at law or in equity, for breach of any of the provisions of this contract.

In witness whereof, the parties hereto have caused this contract to be executed the day and year first above written.

UNITED STATES OF AMERICA,
DEPARTMENT OF THE INTERIOR,

By _____,
Secretary of the Interior.

Attest for Georgia Power Co.:

GEORGIA POWER COMPANY,

By HARLLEE BRANCH, Jr.,
President.

By E. C. HAMMOND,
Secretary.

Comparison of drafts of Clark Hill contracts

Item	Definitive draft of contract dated Sept. 11, 1951, as negotiated by Department of the Interior and Georgia Power Co.		Basic contract of the tricontract arrangement, as of May 28, 1954, as prepared by the Department of the Interior after conferences with Georgia REA Co-ops and Georgia Power Co. and signed by the president of the company	
Annual company payment to Government:				
Firm capacity.....kilowatts..	70,000 at $9.60.....	$672,000	80,000 at $9.00.....	$720,000
Peaking capacity.....do....	42,000 at $6.00.....	252,000	40,000 at $9.00.....	360,000
Firm energy million kilowatt-hours..	265.8 at 3.0 mills....	797,400	330.3 at 3.4 mills.....	1,123,020
Secondary energy.....do....	46.7 at 3.0 mills.....	140,100	19.7 at 2.0 mills.....	39,400
	37.5 at 2.0 mills.....	75,000		
Total.....	112 kilowatts and 350 million kilowatt-hours.	1,936,500	120 kilowatts and 350 million kilowatt-hours.	2,242,420
Power reserved for preference customers:				
Kilowatts:				
At bus bar.....	70,000		80,000	
At preference customers delivery points.	70,000		80,000	
Kilowatt-hours:				
At bus bar.....millions..	306.60		350.0	
Line and transformer losses do....	30.66		35.0	
At preference customers delivery points.....millions..	275.94		315.0	
Mark-up for transmission and service:				
Cost power furnished preference customers:				
Capacity.....kilowatts..	70,000 at $9.60.....	672,000	80,000 at $9.....	720,000
Energy..million kilowatt-hours..	306.6 at 3 mills.....	919,800	330.3 at 3.4 mills.....	1,123,020
			19.7 at 2 mills.....	39,400
Total annual cost.....		1,591,800		1,882,420
Gross receipts from preference customers:				
Capacity.....kilowatts..	70,000 at $10.08.....	705,600	80,000 at $9.....	720,000
Energy..million kilowatt-hours..	275.94 at 3.5 mills...	965,790	315.0 at 4.0 mills.....	1,260,000
Total annual gross receipts.....	.....	1,671,390	.....	1,980,000
Markup for transmission and service.....	.....	79,590	.....	97,580
Average markup per kilowatt-hour delivered.....mills..	.....	0.3	.....	0.3
Power retained by company:				
Firm capacity.....	None		None	
Peaking capacity.....kilowatts..	42,000		40,000	
Firm energy.....	None		None	
Secondary energy million kilowatt-hours...	43.4		None	

Chairman HAYDEN. This concludes the hearings of this sub-subcommittee on the parts of the public works appropriation bill assigned to it.

(Whereupon, at 3:25 p. m., Tuesday, June 21, 1955, the hearing was adjourned.)

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